Central University of Himachal Pradesh

Department of Library and Information Science

School of Mathematics, Computers and Information Science

AGENDA

8th BOARD OF STUDIES MEETING

TO BE HELD ON **30th December, 2022 at 10.00 A.M.**

Venue: Online Mode on Google Meet (https://meet.google.com/pmd-dhsx-ncr)

हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय
Central University of Himachal Pradesh
(Established under Central Universities Act 2009)
शाहपुर परिसर, शाहपुर, ज़िला काँगड़ा, हिमाचल प्रदेश -176206
ShahpurParisar, Shahpur, Distt. Kangra (HP) - 176206
Website: www.cuhimachal.ac.in

आज़ादी का अमृत महोत्सव

LIS-BOS-8/22

AGENDA-INDEX

Agenda Item No.	PARTICULARS	Information
LIS-BOS-8/22-1	To confirm the Minutes of the 7th Board of Studies meeting of the Department of Library and Information Science held on 10th December, 2021 by circulation.	Annexure – I
LIS-BOS-8/22-2	To approve introduction of new course "LIS-436: Preservation and Conservation of Library Materials" in course catalogue of in B.Lib.I.Sc	Annexure – II
LIS-BOS-8/22-3	To approve introduction of new course in M.Lib.I.Sc. "LIS-556: Advanced Data Analysis in Spreadsheets" in course catalogue of in M.Lib.I.Sc.	Annexure – III
LIS-BOS-8/22-4	To approve course contents of the new courses: "LIS-436: Preservation and Conservation of Library Materials" and "LIS-556: Advanced Data Analysis in Spreadsheets"	Annexure – IV & V
LIS-BOS-8/22-5	To approve minor revisions in the following courses as suggested by subject experts in the 6th BoS meeting: **1.** BLIBISC:- LIS - 426 - Management of Library and Information Centres (Added SERVQVAL & LIBQUAL Added in the syllabus) **2.** BLIBISC: -LIS – 471 Media and Information Literacy (MIL) (Title Changed. Old title was Information Literacy) **3.** BLIBISC:- LIS 485 - Knowledge Based Life Skills (Title Changed. Old title was Knowledge Based Life Coaching) **4.** BLIBISC:- LIS 485 - Knowledge Based Life Skills (E-books – Open and Paid & E-Journal – Open and Paid incorporated in the syllabus) **5.** MLIBISC: - LIS - 501 - Library Automation and Networks (Theory) (Digital Security incorporated in the syllabus) **6.** MLIBISC:- LIS – 502 Library Automation and Networking (Practical) (Added components related to Networking in the practicals) **7.** PHD:- LIS 602 - ICT Applications in Library and Information Services (Title changed. Old title was Applications of ICTs in LIS Research)	Annexures – VI to XI
LIS-BOS-8/22-6	To approve introduction of Certificate Course on "Content Management Systems and Applications"	Annexure – XII
LIS-BOS-8/22-7	To approve eligibility, mode, duration, medium of instruction, criteria of selection, intake, list of courses offered in Certificate	

	course on "Certificate Course In Content Management Systems and Applications (Theory and Practice)"	
LIS-BOS-8/22-8	To approve list of courses offered in Ph.D. coursework as per amendments in Ordinance No. 42, clause no. 8.6 of CUHP.	Annexure – XIII
LIS-BOS-8/22-9	To approve course contents of following courses in Ph.D. Coursework as per amendments in Ordinance No. 42, clause no. 8.6 of CUHP: LIS-604: IKS based approaches in LIS, and PTLP: Pedagogy of Teaching Learning Process	Annexure – XIV & XV
LIS-BOS-8/22-10	To approve the release of the result of Ph.D. Coursework of Ms. Navneet Kaur (Roll No.CUHP18RDLIS01) and continue her research in Ph.D. programme.	Annexure – XVI
LIS-BOS-8/22-11	To approve minutes of Departmental Research Committee (DRC) meetings held on 30.09.2022 and 28.12.2022.	Annexure – XVII & XVIII
LIS-BOS-8/22-12	To approve minutes of Research Degree Committee (RDC) meeting held on 29.12.2022.	Annexure – XIX
LIS-BOS-8/22-13	Any other items with permission of the Chair.	

Dr. Dimple Patel
Chairperson & Convenor,
Head, Department of Library and Information Science

हिमाचल प्रदेश केंद्रीय विश्वविद्यालय
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Shahpur Parisar, Shahpur, Distt. Kangra (HP) - 176206
Website: www.cuhimachal.ac.in

आज़ादी का अमृत महोत्सव

File No.: LIS/1-5/BoS/CUHP/22/ 332 Dated: 30/12/2022

MINUTES OF THE MEETING

The **meeting** of the **8th Board of Studies (BoS)** of the **Department of Library and Information Science**, School of Mathematics, Computers and Information Sciences, Central University of Himachal Pradesh, Shahpur Parisar, Shahpur was held on **30th December, 2022** at **10:00 AM** onwards through online mode on **Google Meet** (https://meet.google.com/pmd-dhsx-ncr) in the **Seminar Hall** of the Central University of Himachal Pradesh, Shahpur Parisar, Shahpur. **Dr. Dimple Patel,** Dean, School of Mathematics, Computers and Information Sciences **chaired** the meeting.

The following members attended the meeting through offline mode:-

1. **Dr. Dimple Patel –Chairperson**
   Associate Professor & Head, Department of Library and Information Science, and Dean, School of Mathematics, Computers and Information Sciences, Central University of Himachal Pradesh, Shahpur Parisar, Shahpur.
2. **Dr. Shivarama Rao K. - Member**
   Associate Professor, Department of Library and Information Science, Central University of Himachal Pradesh, Shahpur Parisar, Shahpur.
3. **Prof. Bhag Chand Chauhan - Vice Chancellor's Nominee**
   Professor, Department of Physics and Astronomical Science, Central University of Himachal Pradesh, Shahpur Parisar, Shahpur
4. **Dr. Pankaj Kumar S/o Sh. Krishan Singh – Vice Chancellor's Nominee**
   Assistant Professor, Srinivasa Ramanujan Department of Mathematics, Central University of Himachal Pradesh, Shahpur Parisar, Shahpur.
5. **Mr. Sudam Charan Sahu – Special Invitee**
   Assistant Professor, Department of Library and Information Science, Central University of Himachal Pradesh, Shahpur Parisar, Shahpur

The following members attended the meeting through online mode on Google meet (https://meet.google.com/pmd-dhsx-ncr):-

1. **Dr. Vinod Kumar – Subject Expert**
   Librarian, Guru Jambeshwar University of Science and Technology, Hisar, Haryana
2. **Dr. Ranjit Thakur – Subject Expert**
   Librarian, Bhaskaracharya College of Applied Science, University of Delhi, New Delhi.
3. **Mr. Muruli N., – Member**
   Assistant Professor, Department of Library and Information Science, Central University of Himachal Pradesh, Shahpur Parisar, Shahpur

The **Chairperson** welcomed all the **Hon'ble members** of the **BOS** and **briefed** about the various **agenda items** to be **discussed** in the **meeting** which were **sent in advance** to all the members through **e-mail** including **Subject Experts**. After **detailed discussions** and **deliberations** on each **Agenda** item, the **following decisions** were taken:-

AGENDA ITEM NO. - LIS-BOS-8/22-1

To confirm the Minutes of the 7th Board of Studies meeting of the Department of Library and Information Science held on 10th December, 2021 by circulation.

Decision:

The Minutes of the 7th meeting of Board of Studies (BoS) of the Department of Library and Information Science BoS were Confirmed and Approved attached as Annexure-I.

AGENDA ITEM NO. - LIS-BOS-8/22-2

To approve introduction of new course "LIS-436: Preservation and Conservation of Library Materials" in course catalogue of in B.Lib.I.Sc.

Decision:

All the respective members of BoS unanimously approved the list of new course i.e. LIS-436: Preservation and Conservation of Library Materials, in course catalogue of in B.Lib.I.Sc as attached at Annexure-II.

AGENDA ITEM NO. - LIS-BOS-8/22-3

To approve introduction of new course in M.Lib.I.Sc. "LIS-556: Advanced Data Analysis in Spreadsheets" in course catalogue of in M.Lib.I.Sc.

Decision:

All the respective members of BoS unanimously approved the list of new course i.e. LIS-556: Advanced Data Analysis in Spreadsheets, in course catalogue of in M.Lib.I.Sc as attached at Annexure-III.

AGENDA ITEM NO. - LIS-BOS-8/22-4

To approve course contents of the new courses: "LIS-436: Preservation and Conservation of Library Materials" and "LIS-556: Advanced Data Analysis in Spreadsheets".

Decision:

All the respective members of BoS unanimously approved the Course Contents of new courses i.e. LIS-436: Preservation and Conservation of Library Materials for B.Lib.I.Sc., and LIS-556: Advanced Data Analysis in Spreadsheets for M.Lib.I.Sc., as attached at Annexure-IV & V respectively.

AGENDA ITEM NO. - LIS-BOS-8/22-5

To approve minor revisions in the following courses as suggested by subject experts in the 6th BoS meeting:

1. BLIBISC:- LIS - 426 - Management of Library and Information Centres (Added SERVQUAL & LIBQUAL Added in the syllabus)
2. BLIBISC: -LIS – 471 Media and Information Literacy (MIL) (Title Changed. Old title was Information Literacy)
3. BLIBISC:- LIS 485 - Knowledge Based Life Skills (Title Changed. Old title was Knowledge Based Life Coaching)
4. BLIBISC:- LIS 485 - Knowledge Based Life Skills (E-books – Open and Paid & E-Journal – Open and Paid incorporated in the syllabus)
5. MLIBISC: - LIS - 501 - Library Automation and Networks (Theory) (Digital Security incorporated in the syllabus)

6. MLIBISC:- LIS – 502 Library Automation and Networking (Practical) (Added components related to Networking in the practicals)
7. PHD:- LIS 602 - ICT Applications in Library and Information Services (Title changed. Old title was Applications of ICTs in LIS Research)

Decision:

All the respective members of BoS unanimously approved the minor revision in the courses i.e. LIS 426: Management of Library and Information Centres (Added SERVQUAL & LIBQUAL Added in the syllabus), LIS 471: Media and Information Literacy (MIL) (Title Changed. Old title was Information Literacy), LIS 485: Knowledge Based Life Skills (Title Changed. Old title was Knowledge Based Life Coaching), LIS 485 : Knowledge Based Life Skills (E-books – Open and Paid & E-Journal – Open and Paid incorporated in the syllabus) for B.Lib.I.Sc., LIS 501: Library Automation and Networks (Theory) (Digital Security incorporated in the syllabus), LIS 502: Library Automation and Networking (Practical) (Added components related to Networking in the practicals) for M.Lib.I.Sc., and LIS 602: ICT Applications in Library and Information Services (Title changed. Old title was Applications of ICTs in LIS Research) for Ph.D. course work as per the suggestions of subject experts in the 6th BoS meeting held on 30.07.2021, as attached at Annexure - VI & XI respectively.

AGENDA ITEM NO. - LIS-BOS-8/22-6

To approve introduction of Certificate Course on "Content Management Systems and Applications"

AGENDA ITEM NO. - LIS-BOS-8/22-7

To approve eligibility, mode, duration, medium of instruction, criteria of selection, intake, list of courses offered in Certificate course on "Certificate Course In Content Management Systems and Applications (Theory and Practice)"

Decision:

After the deliberations, the BoS members unanimously approved introduction and modalities of the Certificate Course on "Content Management Systems and Applications" in the Department of Library and Information Science as attached at Annexure - XII.

AGENDA ITEM NO. - LIS-BOS-8/22-8

To approve list of courses offered in Ph.D. coursework as per amendments in Ordinance No. 42, clause no. 8.6 of CUHP.

Decision:

The list of courses offered to the students of Ph.D. Library Science (Course Work) were discussed and unanimously approved by the all respective members of the BoS in the light of National Education Policy-2020 and as per amendments in Ordinance No. 42, clause no. 8.6 of CUHP, as attached at Annexure-XIII.

AGENDA ITEM NO. - LIS-BOS-8/22-9

To approve course contents of following courses in Ph.D. Coursework as per amendments in Ordinance No. 42, clause no. 8.6 of CUHP:-
LIS-604: IKS based approaches in LIS, and PTLP: Pedagogy of Teaching Learning Process

Decision:

The course contents of LIS-604: IKS based approaches in LIS, and PTLP: Pedagogy of Teaching Learning Process, offered to the students of Ph.D. Library Science (Course Work) were discussed and unanimously approved by the all respective members of the BoS in the light of National

Education Policy-2020 and as per amendments in Ordinance No. 42, clause no. 8.6 of CUHP, as attached at Annexure-XIV & XV respectively.

AGENDA ITEM NO. - LIS-BOS-8/22-10

To approve the release of the result of Ph.D. Coursework of Ms. Navneet Kaur (Roll No.CUHP18RDLIS01) and continue her research in Ph.D. programme.

Decision:

All members agreed and approved that the result of Ph.D. Course work of Ms. Navneet Kaur (Roll No. CUHP18RDLIS01) should be declared and she should be allowed to continue her research in Ph.D. Programme.

AGENDA ITEM NO. - LIS-BOS-8/22-11

To approve minutes of Departmental Research Committee (DRC) meetings held on 30.09.2022 and 28.12.2022.

Decision:

The Minutes of the Departmental Research Committee (DRC) meetings held on 30.09.2022 and 28.12.2022 of the Department of Library and Information Science were Confirmed and Approved attached as Annexure - XVII & XVIII.

AGENDA ITEM NO. - LIS-BOS-8/22-12

To approve the Minutes of the Meeting of 1st Research Degree Committee (RDC) meeting held on 29.12.2022.

Decision:

The Minutes of the 1st meeting of Research Degree Committee (RDC) of the Department of Library and Information Science BoS were Confirmed and Approved attached as Annexure - XIX.

AGENDA ITEM NO. - LIS-BOS-8/22-13

Any other item with the permission of the Chair

Decision: No item was taken.

The meeting ended with a vote of thanks to the chair.

Mr. Sudam Charan Sahu
Assistant Professor
(Special Invitee)

Mr. Muruli N.,
Assistant Professor
(Member)

Dr. Shivarama Rao K.
Associate Professor
(Member)

Dr. Pankaj Kumar
S/o Sh. Krishan Singh
(VC's Nominee)

Prof. Bhag Chand Chauhan
(VC's Nominee)

Dr. Vinod Kumar
(Subject Expert)

Dr. Ranjit Thakur
(Subject Expert)

Dr. Dimple Patel
Head, DLIS, & Dean, SoMCIS
(Chairperson & Convener)

Gmail

surjeet Kumar <ssharmacuhp@hpcu.ac.in>

egarding Minutes of the Meeting of 8th BoS meeting

Ranjeet Thakur <ranjeet.thakur@bcas.du.ac.in> Sat, Dec 31, 2022 at 1:07 PM
To: Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in>
Cc: "Dr. Vinod Kumar" <vinugju@gmail.com>, Dimple Patel <dimple@hpcu.ac.in>, "Head, DLIS CUHP" <hod_lisc@hpcu.ac.in>, "Dean Mathematics, Computer & Information Sciences" <dean_smcis@hpcu.ac.in>, surjeet Kumar <ssharmacuhp@hpcu.ac.in>

Thanks for the mail. I hereby confirm the minutes of the BoS meeting held on 30 December 2022. Wish you all a very happy, healthy and prosperous 2023.

Best Regards
Dr Ranjeet S Thakur

On 30-Dec-2022, at 3:25 AM, Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in> wrote:

[Quoted text hidden]
<Agenda of the 8th BoS meeting of DLIS held on 30.12.2022.pdf>
<Minutes of the 8th BoS meeting of DLIS held on 30.12.2022.pdf>

Gmail

surjeet Kumar <ssharmacuhp@hpcu.ac.in>

egarding Minutes of the Meeting of 8th BoS meeting

Sat, Dec 31, 2022 at 9:40 PM

r. Vinod Kumar <vinugju@gmail.com>
o: Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in>
c: ranjeet.thakur@bcas.du.ac.in, Dimple Patel <dimple@hpcu.ac.in>, "Head, DLIS CUHP" <hod_lisc@hpcu.ac.in>, "Dean Mathematics, Computer & Information Sciences" <dean_smcis@hpcu.ac.in>, surjeet Kumar <ssharmacuhp@hpcu.ac.in>

First of all please accept my New Year Best Wishes for 2023. Further I confirm the attached Minutes of the 8th BOS meeting held on December, 2022 through online mode.

Regards

[Quoted text hidden]

Gmail

surjeet Kumar <ssharmacuhp@hpcu.ac.in>

egarding Minutes of the Meeting of 8th BoS meeting

Muruli N <murulitarikere@hpcu.ac.in> Fri, Dec 30, 2022 at 5:51 AM
To: Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in>
Cc: Muruli N Tarikere <murulitarikere@gmail.com>, surjeet Kumar <ssharmacuhp@hpcu.ac.in>, Dimple Patel <dimple@hpcu.ac.in>, "Head, DLIS CUHP" <hod_lisc@hpcu.ac.in>, "Dean Mathematics, Computer & Information Sciences" <dean_smcis@hpcu.ac.in>

Approved

[Quoted text hidden]

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आज़ादी का अमृत महोत्सव

File No.:-LIS/1-5/CUHP/15/26 Date:-10-12-2021

MINUTES OF THE 7th BOARD OF STUDIES MEETING HELD ON 10th DECEMBER, 2021 *(through Circulation mode)*

The meeting of the **7th Board of Studies** of the **Department of Library and Information Science,** School of Mathematics, Computer and Information Sciences, Central University of Himachal Pradesh, Shahpur Parisar, Shahpur was held through **Circulation** mode on **10th December,2021.**

The **Department** circulated the following **agenda items** of the **meeting** to all members of the Board of Studies of the Department of Library and Information Science and decided as under:-

AGENDA ITEM NO.- LIS-BOS-7/21-1

To confirm the minutes of the 6th Meeting of BOS of the Department of Library and Information Science held by circulation on 30th July,2021 attached as Annexure – I.

Decision:

The Minutes of the 6th meeting of the BoS were Confirmed and Approved attached as Annexure – I.

AGENDA ITEM NO.- LIS-BOS-7/21-2

Approval of the Change of Research Supervisor/Guide of Mr. Nimmal Karunakar,Ph.D. Scholar, Roll No. CUHP15RDLIS02 (2015 Batch) due to the demise of his previous Research Supervisor, Prof. I.V. Malhan.

Decision:

All members unanimously agreed and approved the following faculty member as Supervisor/Guide of Mr. Nimmal Karunakar, Ph.D. Scholar, Roll No. CUHP15RDLIS02 (2015 Batch)

Sr. No.	University Roll No.	Name	Father Name	Supervisor Name
1.	CUHP15RDLIS02	Mr.Nimmala Karnuakar	Sh.Nimmala Ashok	Dr. Shivarama Rao K

AGENDA ITEM NO.- LIS-BOS-7/21-3

Approval of the Change of Research Supervisor/Guide of Mr. Vimlesh Patel, Ph.D. Scholar, Roll No. CUHP17RDLIS01 (2017 Batch) due to the demise of his previous Research Supervisor, Prof. I.V. Malhan.

Decision:

All members unanimously agreed and approve the following faculty member as Supervisor/Guide of Mr. Vimlesh Patel, Ph.D. Scholar, Roll No. CUHP17RDLIS01 (2017 Batch)

Sr. No.	University Roll No.	Name	Father Name	Supervisor Name
1.	CUHP17RDLIS01	Mr. Vimlesh Patel	Sh. Ganesh Ram Patel	Dr. Shivarama Rao K

All members have approved the minutes via e-mail. (Enclosed.)

Dr. Dimple Patel
Chairperson & Convener

Gmail

(358)

Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in>

Regarding Agenda and Minutes of the 7th BoS meeting

9 messages

Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in> Fri, Dec 10, 2021 at 5:43 PM
To: Rakesh Kumar <rakesh.lect@gmail.com>, Rakesh Kumar <rakesh.lect@hpcu.ac.in>, Shivarama Rao <shiva.perla@gmail.com>, shiva.perla@hpcu.ac.in, Muruli N Tarikere <murulitarikere@gmail.com>, "Prof. B. C. Chauhan" <bcawake@hpcu.ac.in>, Pankaj Kumar <pankajthakur28.85@gmail.com>, vinugju@gmail.com, ranjeet.thakur@bcas.du.ac.in
Cc: ssharmacuhp@gmail.com, Dimple Patel <dimple@hpcu.ac.in>, "Head, DLIS CUHP" <hod_lisc@hpcu.ac.in>

Respected Sir,
The **Hon'ble Vice Chancellor**, CUHP has accorded **approval** to **conduct** the **7th Board of Studies (BoS) Meeting** of the **Department of Library and Information Science**, School of Mathematics, Computers and Information Sciences **through Circulation mode.** Hence, the **Agenda** and relevant **Annexures** are **attached** herewith for your approval. The **list** of files attached are in the following order:

1. Agenda for the 7th Board of Studies (BoS) Meeting.
2. Minutes of the 6th Meeting of BOS of the Department of Library and Information Science held on 30.07.2021 **[Annexure-1]**
3. Letter of Mr N. Karunakar. Ph.D. Scholar, regarding change of Research Supervisor **[Annexure-2]**
4. Letter of Mr Vimlesh Patial,Ph.D. Scholar, regarding change of Research Supervisor **[Annexure-3]**
5. **Draft Minutes of the 7th BoS Meeting for further approval.**

You are hereby requested to kindly go through the attached files and approve the Draft Minutes of the 7th BOS meeting of DLIS.

धन्यवाद/Thanking you

सादर/regards,

गौरव चम्बयाल/GOURAV CHAMBYAL
डाटा एंट्री ऑपरेटर/Data Entry Operator
गणित, कंप्यूटर एवं सूचना विज्ञान स्कूल /School of Mathematics, Computers and Information Science, and,
अधिष्ठाता छात्र कल्याण (कार्यालय)/ O/o the Dean Students' Welfare
हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय/Central University of Himachal Pradesh
शाहपुर परिसर, शाहपुर/Shahpur Campus, Shahpur
मोबाइल/Mobile: +91- 9418555980
ई-मेल/ E-mail: gourav.cuhimachal@gmail.com, gourav.cuhimachal@hpcu.ac.in

5 attachments

- **Annexure 3 Application of Mr Vimlesh Patel regarding Change of Research Supervisor.pdf** 310K
- **Annexure 2 Application of Mr N. Karunakar regarding Change of Research Supervisor.pdf** 342K
- **Agenda of the 7th BOS meeting of DLIS.pdf** 690K
- **Draft Minutes of the 7th BOS meeting for approval.pdf** 722K

359

Annexure 1 Minutes of the 6th BOS meeting of DLIS.pdf
2604K

Dr. Vinod Kumar <vinugju@gmail.com> Fri, Dec 10, 2021 at 7:55 P
To: Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in>
Cc: Rakesh Kumar <rakesh.lect@gmail.com>, Rakesh Kumar <rakesh.lect@hpcu.ac.in>, Shivarama Rao <shiva.perla@gmail.com>, Shivarama Rao <shiva.perla@hpcu.ac.in>, Muruli N Tarikere <murulitarikere@gmail.com>, "Prof. B. C. Chauhan" <bcawake@hpcu.ac.in>, Pankaj Kumar <pankajthakur28.85@gmail.com>, ranjeet.thakur@bcas.du.ac.in, ssharmacuhp@gmail.com, Dimple Patel <dimple@hpcu.ac.in>, "Head, DLIS CUHP" <hod_lisc@hpcu.ac.in>

I have gone through the agenda and it may be treated as approved from my side.

Regards
[Quoted text hidden]

Prof. B. C. Chauhan <bcawake@hpcu.ac.in> Fri, Dec 10, 2021 at 8:59 PM
To: "Dr. Vinod Kumar" <vinugju@gmail.com>
Cc: Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in>, Rakesh Kumar <rakesh.lect@gmail.com>, Rakesh Kumar <rakesh.lect@hpcu.ac.in>, Shivarama Rao <shiva.perla@gmail.com>, Shivarama Rao <shiva.perla@hpcu.ac.in>, Muruli N Tarikere <murulitarikere@gmail.com>, Pankaj Kumar <pankajthakur28.85@gmail.com>, ranjeet.thakur@bcas.du.ac.in, surjeet kumar <ssharmacuhp@gmail.com>, Dimple Patel <dimple@hpcu.ac.in>, "Head, DLIS CUHP" <hod_lisc@hpcu.ac.in>

Minutes are approved.
[Quoted text hidden]

Dr. Vinod Kumar <vinugju@gmail.com> Sun, Dec 12, 2021 at 10:32 PM
To: "Prof. B. C. Chauhan" <bcawake@hpcu.ac.in>
Cc: Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in>, Rakesh Kumar <rakesh.lect@gmail.com>, Rakesh Kumar <rakesh.lect@hpcu.ac.in>, Shivarama Rao <shiva.perla@gmail.com>, Shivarama Rao <shiva.perla@hpcu.ac.in>, Muruli N Tarikere <murulitarikere@gmail.com>, Pankaj Kumar <pankajthakur28.85@gmail.com>, ranjeet.thakur@bcas.du.ac.in, surjeet kumar <ssharmacuhp@gmail.com>, Dimple Patel <dimple@hpcu.ac.in>, "Head, DLIS CUHP" <hod_lisc@hpcu.ac.in>

Approved.
[Quoted text hidden]

Pankaj Kumar <pankajthakur28.85@gmail.com> Sun, Dec 12, 2021 at 10:40 PM
To: Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in>
Cc: Rakesh Kumar <rakesh.lect@gmail.com>, Rakesh Kumar <rakesh.lect@hpcu.ac.in>, Shivarama Rao <shiva.perla@gmail.com>, shiva.perla@hpcu.ac.in, Muruli N Tarikere <murulitarikere@gmail.com>, "Prof. B. C. Chauhan" <bcawake@hpcu.ac.in>, vinugju@gmail.com, ranjeet.thakur@bcas.du.ac.in, ssharmacuhp@gmail.com, Dimple Patel <dimple@hpcu.ac.in>, "Head, DLIS CUHP" <hod_lisc@hpcu.ac.in>

Approved.
[Quoted text hidden]

Shivarama Rao <shiva.perla@gmail.com> Mon, Dec 13, 2021 at 10:04 AM
To: Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in>

Agenda items and MoM are approved.
[Quoted text hidden]

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Dr. Shivarama Rao K
Associate Professor
Dept. of Library & Information Science
School of Mathematics, Computers & Information Science
Temporary Academic Block (TAB)
Central University of Himachal Pradesh (CUHP)
Shahpur, Dist. Kangra, Himachal Pradesh - 176206

..To teach is to learn again To research is to see beyond::::Experience the joy of giving::

esh Kumar <rakesh.lect@gmail.com>
Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in>
Rakesh Kumar <rakesh.lect@hpcu.ac.in>, Shivarama Rao <shiva.perla@gmail.com>, Shivarama Rao
<shiva.perla@hpcu.ac.in>, Murull N Tarikere <murulitarikere@gmail.com>, "Prof. B. C. Chauhan"
<bcawake@hpcu.ac.in>, Pankaj Kumar <pankajthakur28.85@gmail.com>, vinugju@gmail.com,
ranjeet.thakur@bcas.du.ac.in, ssharmacuhp@gmail.com, Dimple Patel <dimple@hpcu.ac.in>, "Head, DLIS CUHP"
<hod_lisc@hpcu.ac.in>

Mon, Dec 13, 2021 at 5:24 PM

360

Approved
[Quoted text hidden]
--
With best regards

Prof. Rakesh Kumar
Head & Dean
Srinivasa Ramanujan Department of Mathematics
Department of Computer Science and Informatics
School of Mathematics, Computers & Information Science
Shahpur Campus, Shahpur Central University of Himachal Pradesh
Dharamshala, India
Mobile No. +919418670200

Ranjeet Thakur <ranjeet.thakur@bcas.du.ac.in>
To: Rakesh Kumar <rakesh.lect@gmail.com>
Cc: Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in>, Rakesh Kumar <rakesh.lect@hpcu.ac.in>, Shivarama Rao
<shiva.perla@gmail.com>, Shivarama Rao <shiva.perla@hpcu.ac.in>, Murull N Tarikere <murulitarikere@gmail.com>,
"Prof. B. C. Chauhan" <bcawake@hpcu.ac.in>, Pankaj Kumar <pankajthakur28.85@gmail.com>, vinugju@gmail.com,
ssharmacuhp@gmail.com, Dimple Patel <dimple@hpcu.ac.in>, "Head, DLIS CUHP" <hod_lisc@hpcu.ac.in>

Mon, Dec 13, 2021 at 5:29 PM

Approved please.

Best Regards
Dr Ranjeet S Thakur

On 13-Dec-2021, at 5:23 PM, Rakesh Kumar <rakesh.lect@gmail.com> wrote:

[Quoted text hidden]

Murull N <murulitarikere@gmail.com>
To: Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in>
Cc: Rakesh Kumar <rakesh.lect@gmail.com>, Rakesh Kumar <rakesh.lect@hpcu.ac.in>, Shivarama Rao
<shiva.perla@gmail.com>, Shivarama Rao <shiva.perla@hpcu.ac.in>, "Prof. B. C. Chauhan" <bcawake@hpcu.ac.in>,
Pankaj Kumar <pankajthakur28.85@gmail.com>, vinugju@gmail.com, ranjeet.thakur@bcas.du.ac.in, surjeet kumar
<ssharmacuhp@gmail.com>, Dimple Patel <dimple@hpcu.ac.in>, "Head, DLIS CUHP" <hod_lisc@hpcu.ac.in>

Tue, Dec 14, 2021 at 9:16 AM

Approved.

On Fri, 10 Dec, 2021, 5:43 pm Gourav Chambyal, <gourav.cuhimachal@hpcu.ac.in> wrote:
[Quoted text hidden]

PRESERVATION & CONSERVATION OF LIBRARY RESOURCES

Course Code: LIS-436
Course Name: PRESERVATION & CONSERVATION OF LIBRARY RESOURCES
Credits Equivalent: 2 Credits

Course Objective:

This course will facilitate the students to learn the concept of preservation, conservation along with different factors that affect the library materials both book and non-book and their preservation techniques. It also covers various strategies for digital preservation and digital preservation initiatives at national/international level.

UNIT-1 CONCEPT OF PRESERVATION AND CONSERVATION

1.1 Preservation and Conservation: Concept, Need & History
1.2 Evolution of Writing Materials
1.3 Inherent characteristics of the Library Materials – Manuscripts, Books, Periodicals and Newspapers

UNIT-2 HAZARDS TO LIBRARY MATERIALS

2.1 Environmental Factors – Temperature, Humidity, Light and Dust
2.2 Biological Factors – Fungi, Insects and Other Pests
2.3 Chemical Factors – Chemicals used in Production and Preservation of Documents UNIT-3

UNIT-3 PREVENTIVE METHODS OF PRESERVATION OF LIBRARY RESOURCES

3.1 Preventive Measures for Environmental, Biological and Chemical Factors
3.2 Variety of Non-Book Materials and Physical Environment for Storing of NonBook Materials
3.3 Disaster Preparedness/Response
3.4 Care and Handling of Library Resources (Both books& Non-book materials)

UNIT-4 CURRENT TRENDS IN PRESERVING THE LIBRARY MATERIALS

4.1 Digital Preservation: It's Need
4.2 Challenges and Strategies for Preserving Digital Contents
4.3 Role of International/National Organisations
4.4 Indian Initiatives towards Digital Preservation

Suggested Readings:

1. Harvey, R. (1994). Preservation in libraries: principles, strategies and practices for librarians. London: Bowker Saur.

2. Feather, J. (1996). Preservation and the management of library collections. (2 nd ed.). London: Library Association Publishing.

3. Prajapati, C.L. (1997). Archivo-Library materials – Their enemies and need of first phase conservation. New Delhi: Mittal Publications.

4. Burkett, J. & Morgan, T. S. (Eds.). (1963). Special Materials in the Library. London: Library Association.

5. Fothergill, R. & Butchart, I. (1990). Non-book materials in libraries. A practical guide. London: Clive Bingley.

6. Gabriel, M. & Ladd, D. (1980). The microform revolution in libraries. Greenwich: JAI Press.

7. Leggett, E. R. (2014). Digitization and digital archiving: A practical guide for librarians. Maryland,USA: Rowman & Littlefield.

8. Nair, S.M. (1977). Biodeterioration of paper conservation of cultural property in India. New Delhi: National Museum.

9. Barow, W. J. (1960). Permanent and durable book paper. Richmond, USA: Virginia State Library.

10. Chakrabarti, B. & Mahapatra, P. K. (1991). Library collection: Selection and preservation. Calcutta:WordPress

Advanced Data Analysis in Spread-sheet (Practical)

Course Code: LIS 556

Course Name: Advanced Data Analysis in Spread-sheet (Practical)

Credits Equivalent: 2 Credits

The use of Spread-sheet is widespread in the all sectors for data analysis and visualisations. It is a very powerful data analysis tool and almost all big and small tasks use Spread-sheet in their day-to-day functioning. This is an introductory course in the use of Spread-sheet and is designed to give you a working knowledge of Spread-sheet with the aim of getting to use it for data analysis in research.

UNIT-I

Basic Spread-sheet functionality (The Importance of Spread-sheet)

UNIT-II

Using Spread-sheet functions and techniques for analysis

Mathematical Function in Spread-sheet (SUM Function, Count Function, LEN Function, TRIM Function, RIGHT, LEFT and MID Function, VLOOKUP, IF Statements.)

UNIT-III

Using Spread-sheet functions for Data Visualisations

Column Chart, Line Chart, Pie Chart, Bar Chart, Geo Chart

UNIT-VI

R packages for data analysis

What you'll learn

- Understand and identify the principles of data analysis
- Build presentation ready dashboards in Spread-sheet
- Apply analysis techniques to datasets in Spread-sheet
- Become adept at using Spread-sheet functions and techniques for analysis
- Learn how to use Pivot Tables and Pivot Charts to streamline your workflow in Spread-sheet
- Use effective design principles when creating and presenting data
- Learn about the Spread-sheet Data Model
- GeoFlow

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हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय
Central University of Himachal Pradesh
(Established under Central Universities Act 2009)
अस्थाई शैक्षणिक खण्ड, शाहपुर, ज़िला काँगड़ा, हिमाचल प्रदेश -176206
Temporary Academic Block, Shahpur, Distt. Kangra (HP) - 176206
Website: www.cuhimachal.ac.in

File No.: LIS/1-5/CUHP/15/ ४४(a) Dated: 30.07.2021

MINUTES OF THE 6th BOARD OF STUDIES MEETING HELD ON 30th JULY, 2021

The **meeting** of the **6th Board of Studies** of the **Department of Library and Information Sciences**, School of Mathematics, Computers and Information Sciences, Central University of Himachal Pradesh, Temporary Academic Block, Shahpur was held through **online mode** on **Google Meet** (**https://meet.google.com/rdy-jsud-cbh**) on **30th July, 2021** at **10:30 AM**. During the meeting, all members were **available** on **Google Meet**. Dr. Dimple Patel, **Head**, Department of Library and Information Science **chaired** the meeting.

Following members attended the meeting:

1. **Dr. Dimple Patel – Chairperson and Convener**
   Head, Department of Library and Information Science, Central University of Himachal Pradesh, Temporary Academic Block, Shahpur.
2. **Prof. Rakesh Kumar – Member**
   Dean, School of Mathematics, Computers and Information Sciences, Central University of Himachal Pradesh, Temporary Academic Block, Shahpur.
3. **Dr. Vinod Kumar – Subject Expert**
   Librarian, Guru Jambheshwar University of Science and Technology, Hisar, Haryana.
4. **Dr. Ranjit Singh Thakur – Subject Expert**
   Librarian, Bhaskaracharya College of Applied Sciences (University of Delhi), Sector 2, Phase 1, Dwarka, New Delhi.
5. **Prof. Bhag Chand Chauhan – Vice Chancellor's Nominee**
   Professor, Department of Physics and Astronomical Science, Central University of Himachal Pradesh, Temporary Academic Block, Shahpur.
6. **Dr. Pankaj Kumar S/o Sh. Krishan Singh – Vice Chancellor's Nominee**
   Assistant Professor, Srinivasa Ramanujan Department of Mathematics, Central University of Himachal Pradesh, Temporary Academic Block, Shahpur.
7. **Dr. Shivarama Rao K – Member**
   Associate Professor, Department of Library and Information Science, Central University of Himachal Pradesh, Temporary Academic Block, Shahpur.
8. **Dr. Pawan Kumar Saini – Member**
   Assistant Professor, Department of Library and Information Science, Central University of Himachal Pradesh, Temporary Academic Block, Shahpur.
9. **Mr. Muruli N. – Special Invitee**
   Assistant Professor, Department of Library and Information Science, Central University of Himachal Pradesh, Temporary Academic Block, Shahpur.

The **Chairperson** welcomed all the **Hon'ble members & Special Invitees** and **briefed** about the **past activities** and also about the various **agenda items** to be **discussed** in the **meeting** which were **sent** in **advance** to all members through **e-mail** including **Subject Experts**. Various **Agenda Items** were **placed** before the **committee** and after **detailed discussion** and **deliberations** on each, the **following decisions** were taken:-

Annexure – I (573)

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AGENDA ITEM NO. - LIS-BOS-6/21-1

To confirm the minutes of the Fifth Meeting of BOS of the Department of Library and Information Science held by circulation on 24th December, 2020 attached as Annexure - 1.

Decision:

The Minutes of the 5th meeting of the BoS were Confirmed and Approved.

AGENDA ITEM NO. - LIS-BOS-6/21-2

To ratify and approve the course contents of the courses offered in the first and second semesters of the B.Lib.I.Sc. (One Year) programme of study attached as Annexure - 2.

Decision:

All members unanimously approved the course contents of the courses offered in the first and second semesters of the B.Lib.I.Sc. (One Year) programme of study attached as Annexure - 2.

AGENDA ITEM NO. - LIS-BOS-6/21-3

To ratify and approve the course contents of the courses offered in the first and second semesters of the M.Lib.I.Sc. (One Year) programme of study attached as Annexure - 3.

Decision:

All members unanimously approved the course contents of the courses offered in the first and second semesters of the M.Lib.I.Sc. (One Year) programme of study attached as Annexure - 3.

AGENDA ITEM NO. - LIS-BOS-6/21-4

To ratify and approve the course contents of the courses offered in the First Semester (Winter Session, 2020) of the Ph.D. Library and Information Science attached as Annexure – 4.

Decision:

All members unanimously approved the course contents of the courses offered in the First Semester (Winter Session, 2020) of the Ph.D. Library and Information Science attached as Annexure – 4.

AGENDA ITEM NO. - LIS-BOS-6/21-5

To ratify and approve the course contents of the course code LIS 597 in the fourth semester of the M.Lib.I.Sc. (Two Year) programme of study attached as Annexure – 5.

Decision:

All members unanimously approved the course contents of the course code LIS 597 in the fourth semester of the M.Lib.I.Sc. (Two Year) programme of study attached as Annexure – 5.

AGENDA ITEM NO. - LIS-BOS-6/21-6

Proposal of the Faculty Members of the Department of Library and Information Science to become M.Phil./Ph.D. Supervisor/Guide.

Decision:

All the members of BoS unanimously approved the following Faculty Members as Research Supervisor(s) for Ph.D scholars of the Department as per CUHP Ordinance No. 42, Clause 6:

1. Dr. Shivarama Rao K., Associate Professor, Department of Library and Information Science, School of Mathematics, Computers and Information Sciences.
2. Dr. Pawan Kumar Saini, Assistant Professor, Department of Library and Information Sciences, School of Mathematics, Computers and Information Sciences.

AGENDA ITEM NO. - LIS-BOS-6/21-7

Approval of the allotment of Research Supervisor/Guide for Ph.D. Scholars (2020 batch)

Decision:

All members unanimously resolved to approve the following faculty members as Supervisor(s)/ Guide(s) for Ph.D. Scholars (2020 batch).

Sr. No.	University Roll No.	Name	Father Name	Supervisor Name
1	CUHP20RDLIS01	Abhinandan	Pratibha Sharan Mishra	**Dr. Pawan Kumar Saini**
2	CUHP20RDLIS02	Akanksha Parmar	Sudershan Singh	**Dr. Shivarama Rao K.**
3	CUHP20RDLIS03	Priya	Vinod Kumar	**Dr. Shivarama Rao K.**
4	CUHP20RDLIS04	Vikramjeet	Sahib Singh	**Dr. Shivarama Rao K.**
5	CUHP20RDLIS05	Vishal Kumar	Ved Prakash	**Dr. Pawan Kumar Saini**
6	CUHP20RDLIS06	Vivek Aggarwal	Dinesh Aggarwal	**Dr. Dimple Patel**

AGENDA ITEM NO. - LIS-BOS-6/21-8

Approval to constitute the Research Advisory Committee (RAC) for the Ph.D. Scholars, 2020 batch (As per CUHP Ordinance No. 42, Clause 9)

Decision:

All members agreed and approved the following Research Advisory Committee (RAC) for for the Ph.D. Scholars, 2020 batch.

Sl. No.	Name of Ph.D. Student	Registration No.	Constitution of RAC
1.	CUHP20RDLIS01	Abhinandan	1. Head of the Department **(Ex-Officio Chairperson)** 2. Dr. Pawan Kumar Saini **(Convener/Supervisor)** 3. Dr. Shivarama Rao K. **(Subject Expert)**
2.	CUHP20RDLIS02	Akanksha Parmar	1. Head of the Department **(Ex-Officio Chairperson)** 2. Dr. Shivarama Rao K. **(Convener/Supervisor)** 3. Dr. Keshav Singh Rawat **(Subject Expert)**

	CUHP20RDLIS03	Priya	1. Head of the Department **(Ex-Officio Chairperson)** 2. Dr. Shivarama Rao K. **(Convener/Supervisor)** 3. Dr. Keshav Singh Rawat **(Subject Expert)**
4.	CUHP20RDLIS04	Vikramjeet	1. Head of the Department **(Ex-Officio Chairperson)** 2. Dr. Shivarama Rao K. **(Convener/Supervisor)** 3. Dr. Keshav Singh Rawat **(Subject Expert)**
5.	CUHP20RDLIS05	Vishal Kumar	1. Head of the Department **(Ex-Officio Chairperson)** 2. Dr. Pawan Kumar Saini **(Convener/Supervisor)** 3. Dr. Shivarama Rao K. **(Subject Expert)**
6.	CUHP20RDLIS06	Vivek Aggarwal	1. Head of the Department **(Ex-Officio Chairperson)** 2. Dr. Dimple Patel **(Convener/Supervisor)** 3. Dr. Shivarama Rao K. **(Subject Expert)**

AGENDA ITEM NO. - LIS-BOS-6/21-9

Any item with the permission of the Chair: **No item was taken**

The meeting ended with a vote of thanks to the chair.

Mr. Muruli N.
(Special Invitee)

Dr. Pawan Kumar Saini
(Member)

Dr. Shivarama Rao K.
(Member)

Dr. Pankaj Kumar
S/o Sh. Krishan Singh
(VC's Nominee)

Prof. Bhag Chand Chauhan
(VC's Nominee)

Approved via e-mail
Dr. Ranjit Singh Thakur
(Subject Expert)

30/07/2021
Dr. Vinod Kumar
(Subject Expert)

Prof. Rakesh Kumar
(Dean, SoMCIS)

Dr. Dimple Patel
Chairperson & Convener

Annexure

271

Gmail

Gourav Chambyal <gourav.cuhimachal@gmail.com>

Regarding Minutes of the Meeting

3 messages

Gourav Chambyal <gourav.cuhimachal@gmail.com> Tue, Aug 10, 2021 at 2:00 PM
To: "Dr. Vinod Kumar" <vinugju@gmail.com>, ranjeet.thakur@bcas.du.ac.in
Cc: Shivarama Rao <shiva.perla@gmail.com>, Dimple Patel <dimple@hpcu.ac.in>, "Head, DLIS CUHP" <hod_lisc@hpcu.ac.in>

Dear Sir,
Please find attached herewith the minutes of the 6th meeting Board of Studies of the Department of Library and Information Science held on 30.07.2021 at 10:30 AM through online mode on Google Meet. The Remuneration/Honorarium form to attend the meeting is also attached for your perusal. You are hereby requested to kindly put your **digital signatures (dated 30.07.2021)** in the file and send it back to me for further necessary action.

It is also requested to give permission to copy & paste your signature for preparation of a single file.

धन्यवाद/Thanking you

सादर/regards,

गौरव चम्बयाल/GOURAV CHAMBYAL
डाटा एंट्री ऑपरेटर/Data Entry Operator
गणित, कंप्यूटर एवं सूचना विज्ञान स्कूल /School of Mathematics, Computers and Information Science, and,

अधिष्ठाता छात्र कल्याण (कार्यालय)/ O/o the Dean Students' Welfare

हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय/Central University of Himachal Pradesh
अस्थाई शैक्षणिक खण्ड, शाहपुर/Temporary Academic Block – Shahpur
मोबाइल/Mobile: +91- 9418555980

ई-मेल/ E-mail: gourav.cuhimachal@gmail.com, gourav.cuhimachal@hpcu.ac.in

8 attachments

- **Minutes of the 6th BoS meeting of DLIS held on 30.07.2021.docx** 82K
- **Annexure - 5, Course Content LIS 597 M.Lib.I.Sc. 02 years.pdf** 156K
- **Annexure - 1,Minutes of the 5th BOS meeting.pdf** 907K
- **Annexure - 4, Course Content PhD Library.pdf** 2747K
- **Annexure - 3, Course Content M.Lib.I.Sc. - 1 year.pdf** 4877K
- **Annexure - 2, Course Content B.Lib.I.Sc. - 1 year.pdf** 6250K
- **Agenda of 6th BoS meeting of LIS held on 30.07.2021.pdf** 688K
- **F-2 - TA claim - Non Official Members (Hindi) (2).pdf** 660K

(2×2)

Ranjeet Thakur <ranjeet.thakur@bcas.du.ac.in> Tue, Aug 10, 2021 at 8:17
To: Gourav Chambyal <gourav.cuhimachal@gmail.com>
Cc: "Dr. Vinod Kumar" <vinugju@gmail.com>, Shivarama Rao <shiva.perla@gmail.com>, Dimple Patel <dimple@hpcu.ac.in>, "Head, DLIS CUHP" <hod_lisc@hpcu.ac.in>

Dear sir
Thanks for your email. I hereby confirm the minutes of the meeting of BoS held on 30 July 2021 on Google Meet.

Best Regards
Dr Ranjeet S Thakur

On 10-Aug-2021, at 1:31 AM, Gourav Chambyal <gourav.cuhimachal@gmail.com> wrote:

[Quoted text hidden]
<Minutes of the 6th BoS meeting of DLIS held on 30.07.2021.docx>
<Annexure - 5, Course Content LIS 597 M.Lib.I.Sc. 02 years.pdf>
<Annexure - 1,Minutes of the 5th BOS meeting.pdf>
<Annexure - 4, Course Content PhD Library.pdf>
<Annexure - 3, Course Content M.Lib.I.Sc. - 1 year.pdf>
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<Agenda of 6th BoS meeting of LIS held on 30.07.2021.pdf>
<F-2 - TA claim - Non Official Members (Hindi) (2).pdf>

Dr. Vinod Kumar <vinugju@gmail.com> Wed, Aug 11, 2021 at 7:11 AM
To: Gourav Chambyal <gourav.cuhimachal@gmail.com>

I confirm the minutes of the meeting of BoS held on 30 July 2021 on Google Meet.

Best Regards

[Quoted text hidden]

CENTRAL UNIVERSITY OF HIMACHAL PRADESH
[ESTABLISHED UNDER THE CENTRAL UNIVERSITIES ACT 2009]
PO BOX: 21, DHARAMSHALA, DISTRICT KANGRA - 176215 (HP)
www.cuhimachal.ac.in

Course Code: LIS 426

Course Name: Management of Library and Information Centres

Credits Equivalent: 4 Credits (One credit is equivalent to 10 hours of lectures / organized classroom activity / contact hours; 5 hours of laboratory work / practical / field work / Tutorial / teacher-led activity and 15 hours of other workload such as independent individual/ group work; obligatory/ optional work placement; literature survey/ library work; data collection/ field work; writing of papers/ projects/dissertation/thesis; seminars, etc.)

Course Objectives:

1. To acquaint students with various functions and management of library / information centers
2. To train the students to become effective librarians/Information managers

Attendance Requirements:

Students are expected to attend all lectures in order to be able to fully benefit from the course. A minimum of 75% attendance is a must failing which a student may not be permitted to appear in examination.

Evaluation Criteria:

1. Mid Term Examination: 25%
2. End Term Examination: 50%
3. Counseling, Activities and Tutorials (CAT): 25%
    - I. Assignment: 10%
    - II. Library Work: 5%
    - III. Seminar: 5 %
    - IV. Surprise Test: 5%

Course Contents

UNIT - I: Principles and Functions of Management **(10 Hours)**

- Management: concept, definition and scope
- Planning, organizing, staffing, directing, coordinating, reporting, Budgeting and controlling
- Principles of management and their application in Libraries and Information Centres
- Schools of Management Thought: Scientific Management, Classical Theory and Modern Theories.

UNIT- II : Library Housekeeping Operations **(10 Hours)**

- Acquisition: meaning types, functions – book selection, procurement, collection development, problems; Technical processing
- Circulation control: Functions and Methods of Charging and Discharging System-Browne and Newark System
- Serials control: Purpose, Functions and Processing-Three Card System
- Reference Section: Reference Collections, Staff and Services
- Maintenance Section: Binding, Shelving, Stock Rectification
- Stock verification: Policies, Procedures and Methods

UNIT - III: Financial and Human Resource Management (10 Hours)

- Financial Management: Sources of finance; resource mobilization
- Budgeting: Concept and types (PPBS, ZBB and Line Budget), Techniques; Cost Effective and Cost Benefit Analysis, Annual Reports & Statistics; Library Authority and Committee
- Human Resource Management: Concept Planning, Job Analysis, Job Description, Job Evaluation, Selection, Recruitment, Training and Development, Performance Appraisal; Staff Manual.

UNIT - IV: System Analysis and Performance Parameters **(10Hours)**

- System Analysis and Design, Work Flow and Organizational Routines
- Total Quality Management (TQM): -Concepts, Principles and Techniques, Six Sigma; Evaluation of Services of Libraries and Information Centers
- Project Management: PERT, CPM and Change Management
- Monitoring Techniques: OR, MIS, MBO, Network Analysis, Time and Motion Study and SWOT Analysis.

Recommended Readings

1. Brophy, Peter and Courling Kote(1997). *Quality Management for Information and Library Managers.* Bombay: Jaico
2. **B**yrson, J. (2017). *Effective Library and Information Centre Management.* S.l.: Routledge.
3. Evans, G. E.&Alire, C. (2014). *Management Basics for Information Professionals.* 3 rd ed. Chicago: American Library Association.
4. Griffin, R. W. (2016). *Fundamentals of Management.* Boston, MA: Cengage Learning.
5. Hayss, Robert M. (2001). *Models for Library Management, Decision-Making and Planning.* New York: Academic Press.
6. Matarazzo, J. M.& Pearlstein, T. (2018). *The Emerald handbook of modern information management.* UK: Emerald Publishing.
7. Matthews, J. R. (2018). *The evaluation and measurement of library services.* CA: Libraries Unlimited.
8. Mittal, R. L. (2007). *Library administration: Theory and practice.* 5 th ed. New Delhi: EssEss.
9. Moran, B. B.&Morner, C. J. (2018). *Library and information center management.* California : Libraries Unlimited.
10. Osborne, Larry N&Nakamura, Margaret. (2000). *Systems Analysis for Librarians and Information Professionals.* 2 nd ed. Englewood Cliffs: Libraries Unlimited.
11. Simmons-Welburn, J.& McNeil, B. (2004). *Human resource management in today's academic library: Meeting challenges and creating opportunities.* Westport, Conn: Libraries Unlimited.
12. Stueart, R. D. & Moran, B. B. (2013). *Libraries and information center management.* 8th ed. London: Libraries Unlimited.

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Course Code: LIS-471

Course Name: Information Literacy

Credits Equivalent: 2 Credits (One credit is equivalent to 10 hours of lectures / organised classroom activity / contact hours; 5 hours of laboratory work / practical / field work / Tutorial / teacher-led activity and 15 hours of other workload such as independent individual/ group work; obligatory/ optional work placement; literature survey/ library work; data collection/ field work; writing of papers/ projects/dissertation/thesis; seminars, etc.)

Course Objectives:

- The Students will understand the basic concepts of Information Literacy, Media & Information Literacy and the different Models & Standards of Information Literacy.
- The Students will be able to use different Discovery Tools for accessing Scholarly resources.
- Students will also understand the different Characteristics and Applications of World Wide Web.

Attendance Requirements:
Students are expected to attend all lectures in order to be able to fully benefit from the course. A minimum of 75% attendance is a must failing which a student may not be permitted to appear in examination.

Evaluation Criteria:

- Mid Term Examination: 25%
- End Term Examination: 50%
- Continuous Internal Assessment : 25%
  - Assignment/Library Work/Class Test/Surprise Test/Quiz: 15%
  - Class Attendance: 10%

Course Content:

UNIT - I: Information Literacy **(5 Hours)**

- Concept, Objectives, Need for Information Literacy
- Historical Background
- Information Literacy Models
- ACRL information literacy standards
- Imparting Information Literacy

UNIT - II: Fundamentals of Media and Information Literacy **(5 Hours)**

- Concept & Definition,
- Need and purpose of media and information literacy
- Types of Literacy
- SCONUL Seven pillars of information literacy

UNIT - III: Information Discovery and Search **(5 Hours)**

- Internet Search Engines: Origin, development, types,
- Information Search Tools: OPACs and WorldCat
- Discovery tools for OA scholarly information: DOAJ, ROAR, OpenDOAR, DOAB.

UNIT - IV: Social Web **(5 Hours)**

- Web 1.0, Web 2.0 Web 3.0 & Web 4.0: characteristics, features.
- Collaborative content development: Social networking sites, Blogs, Microblogs, Wikis, RSS, Podcasting, Social Tagging, Social Bookmarking,
- Role of Social Web in society.
- Academic & Professional networking sites for LIS professionals.

Prescribed Text Books:

1. Mahiri, Jabari. Digital Tools in Urban Schools: Mediating a Remix of Learning. Series: Technologies of the Imagination. Published: Ann Arbor, MI: University of Michigan Press, 2011. Full text of e-book available for reading at: http://dx.doi.org/10.3998/toi.10329379.0001.001
   Last accessed on: 10th June, 2013
2. Kenix, Linda Jean. Alternative and Mainstream Media. ISBN: 9781849665421, Publisher: Bloomsbury Academic, Year: 2011. Full text of e-book available for reading at: http://www.bloomsburyacademic.com/view/AlternativeMainstreamMedia_9781849665421/book-ba-9781849665421.xml
   Last accessed on: 10th June, 2013
3. Neuman, W. Russell, Ed. Media, Technology, and Society: Theories of Media Evolution. Series: digitalculturebooks. Published: Ann Arbor, MI: University of Michigan Press, 2010. Full text of e-book available for reading at: http://dx.doi.org/10.3998/dcbooks.8232214.0001.001
   Last accessed on: 10th June, 2013
4. Krishna Kumar: Reference Service, Ed.3, New Delhi, Vikas, 2003.
5. Association of College And Research Libraries. Objectives for Information Literacy Instruction: A Model Statement for Academic Librarians. (2001). ACRL, available at : www.ala.org/acrl/guides/objinfolit.html
   Last accessed on: 10th June, 2013
6. Baldwin (V A). Information Literacy in Science & Technology Disciplines. Library Conference Presentation and Speech. (2005).University of Nebraska, Lincoln. http://digitalcommons.unl.edu/library_talks/11
7. Martin white. Making search work: implementing web, intranet and enterprise search. Facet publishing, New York (2005)
   Last accessed on: 10th June, 2013

Suggested Extra Readings:

1. Carey, John and Elton, Martin C. J. When Media Are New: Understanding the Dynamics of New Media Adoption and Use. Series: New Media World. Published: Ann Arbor, MI: University of Michigan Press, 2010. Full text of e-book available for reading at: : http://dx.doi.org/10.3998/nmw.8859947.0001.001
   Last accessed on: 10th June, 2013
2. Martin White. Making search work: implementing web, intranet and enterprise search. Facet publishing, New York (2005)
3. The Hyperlinked Society: Questioning Connections in the Digital Age. Joseph Turow and Lokman Tsui, Editors. Series: New Media World. Published: Ann Arbor, MI: University of Michigan Press, 2008. Full text of e-book available for reading at: http://dx.doi.org/10.3998/nmw.5680986.0001.001
   Last accessed on: 10th June, 2013
4. How Canadians Communicate IV: Media and Politics. Authors: Waddell, Christopher and Taras, David. ISBN: 9781926836812 9781926836829 9781926836829 Year: 2012 Pages: 401 Publisher: Athabasca University Press. Full text of e-book available for reading at: http://www.aupress.ca/index.php/books/120205
   Last accessed on: 10th June, 2013

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Course Code: LIS 485

Course Name: Knowledge Based Life Coaching

Credits Equivalent: 2 Credits (One credit is equivalent to 10 hours of lectures / organized classroom activity / contact hours; 5 hours of laboratory work / practical / field work / Tutorial / teacher-led activity and 15 hours of other workload such as independent individual/ group work; obligatory/ optional work placement; literature survey/ library work; data collection/ field work; writing of papers/ projects/dissertation/thesis; seminars, etc.)

Course Objectives:

- The Students will understand the basic concepts of Knowledge society, how to survive in the competitive world and smart work with smart technologies.
- The Students will be able to use different web search tools for accessing information resources
- To know strategies to be used in Future of Work and job skills requirements
- To understand the basics of knowledge management and to build soft skills

Attendance Requirements:
Students are expected to attend all lectures in order to be able to fully benefit from the course. A minimum of 75% attendance is a must failing which a student may not be permitted to appear in examination.

Evaluation Criteria:

- Mid Term Examination: 25%
- End Term Examination: 50%
- Continuous Internal Assessment: 25%
  - Assignment/Library Work/Class Test/Surprise Test/Quiz: 15%
  - Class Attendance: 10%

Course Content:

UNIT - I: Ongoing Global and Societal Changes

- Knowledge Society
- Hyper competition and how to survive and thrive in it?
- Role of information in achieving success
- Technology and Smart Work

UNIT – II: Empowering through Information Literacy

- WorldCat
- IndCat, DELNET
- General Search Engines
- Specialized Search Engines

UNIT – III: E-Resources

- E-books
- E-Journals
- Virtual Libraries
- Digital Repositories

UNIT – IV: Work Place Changes, Strategic Planning and Soft Skills

- Future of work and its implications for jobs and skills
- Tools for Collaborative Work
- Personal and Professional Development
- Strategic Planning and Team Building
- Knowledge Management
- Time Management and Stress Management

Prescribed Readings:

1. SinghaRoy, Debal K. Towards a knowledge society: new identities in emerging India. Cambridge University Press, New York, 2014
2. The emergent knowledge society and the future of higher education\Asian perspectives, Routledge, London, 2012
3. Knowledge Society, INFLIBNET, 2015
4. Hassan, Robert., Information society. Polity Press, Malden, MA, 2008
5. GRASSIAN, ESTHER S. and KAPLOWITZ, JOAN R., Information literacy instruction: theory and practice, Neal-Schuman Publishers, Inc, New York, 2009.
6. REDDY, B. RATHAN, Knowledge management (tool for business development) [text, concepts, cases and exercises], Himalaya Publishing House, Mumbai, 2009
7. WARIER, E. SUDHIR, Knowledge management, Vikas Publishing House Pvt Ltd, New Delhi, 2003

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Course Code: LIS501

Course Name: Library Automation and Networks (Theory)

Credits Equivalent: 4 Credits (One credit is equivalent to 10 hours of lectures / organized classroom activity / contact hours; 5 hours of laboratory work / practical / field work / Tutorial / teacher-led activity and 15 hours of other workload such as independent individual/ group work; obligatory/ optional work placement; literature survey/ library work; data collection/ field work; writing of papers/ projects/dissertation/thesis; seminars, etc.)

Course Objectives:

On successful completion of the course the students will be able to do the following:

- To acquaint the students with the planning and management of automated library systems
- To impart practical training in the housekeeping operation

Attendance Requirements:

Students are expected to attend all lectures in order to be able to fully benefit from the course. A minimum of 75% attendance is a must failing which a student may not be permitted to appear in examination.

Evaluation Criteria:

1. Mid Term Examination: 25%
2. End Term Examination: 50%
3. Counseling, Activities and Tutorials (CAT): 25%
   i. Assignment: 5%
   ii. Library Work: 5%
   iii. Surprise Test: 5%

Course Content:

UNIT - I: Library automation

- Definition, need, purpose and advantages, historical development
- Identifying goals and objectives of automation
- Areas of Automation: Acquisition, technical services, OPAC, Administrative routines, Circulation and Serial Control
- Application of barcoding, RFID in libraries

UNIT - II: Evaluation of library automation systems

- Criteria for selection of library automation software: open sources ,property, customize
- Criteria for selection of hardware specification

- Evaluation techniques
- Study of standards relevant to library automation

UNIT - III: Automation Procedure

- Steps in Automation: Developing a basic Technology Plan
- Assessing needs and priorities, Preparing strategic Plan, Feasibility Study, Describing existing library services and technology
- Retrospective conversation techniques and process
- Integrated Library Management System, KOHA and SOUL
- Current trends in Library automation

UNIT - IV: Library networks and information systems

- Library Networks- OCLC, BLAISE, INFLIBNET, STN, RLIN
- Information Systems: NISCAIR, DESIDOC, SENDOC, NASSDOC
- PADIS, ENVIS, INIS
- AGRIS, BIOSIS, MEDLARS

Prescribed Text Books:

1. R.S.Aswal. Library Automation for 21 stCentury, NewDelhi, EssEss Publication.
2. Desiree Webber and Andrew Peters. Integrated Library Systems: Planning, Selecting, and Implementing,London: Libraries Unlimited, 2010.
3. Thomas R. Kochtanek and Joseph R. Matthews . Library Information Systems: From Library Automation to Distributed Information Access Solutions, London: Libraries Unlimited, 2002
4. H. K. kaul. Library Networks: An Indian Experience, New Delhi: Virgo Publications, 1992

Suggested Extra Readings:

1. Satyanarayana, N. R. A manual of computerization of libraries. New Delhi: ViswaPrakashan, 1995.
2. John M. Cohn, Ann L. Kelsey and Keith Michael Fiels .Planning for library automation: A Practical Handbook, London : Library Association, 1998.
3. Michael D. Cooper, Design of Library Automation Systems: File Structures, Data Structures, and Tools, London: John Wiley & Sons

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Course Code: LIS-502

Name of the Course: Library and Automation Network **(Practical)**

Credits Equivalent: 4 Credits (One credit is equivalent to 10 hours of lectures / organised Classroom activity / contact hours; 5 hours of laboratory work / practical / field work /Tutorial / teacher-led activity and 15 hours of other workload such as independent Individual/ group work; obligatory/ optional work placement; literature survey/ library Work; data collection/ field work; writing of papers/ projects/dissertation/thesis; seminars, Etc.)

Course Objectives:

- To impart practical training in the use software to develop bibliographic databases.
- To give practical training in the use of library automation software

Attendance Requirements:

Students are expected to attend all lectures in order to be able to fully benefit from the course. A minimum of 75% attendance is a must failing which a student may not be permitted to appear in examination.

Evaluation Criteria:

1. Mid Term Examination: 25%
2. End Term Examination: 50%
3. Counselling, Activities and Tutorials (CAT): 25%
    i. Assignment: 5%
    ii. Surprise Test: 5%
    iii. Mini Project: 15%

Course Content:

UNIT - I: Hands-on experience with the WINISIS
UNIT-II: Hands-on experience with the KOHA
UNIT-III: Hands-on experience with the SOUL
UNIT-IV: Mini project

Text Books:

1. WINISIS Manual
2. KOHA Manual
3. SOUL Manual

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Course Code: LIS-602

Course Name: Applications of ICTs in LIS Research

Credits Equivalent: 2 Credits (One credit is equivalent to 10 hours of lectures / organised classroom activity / contact hours; 5 hours of laboratory work / practical / field work / Tutorial / teacher-led activity and 15 hours of other workload such as independent individual/ group work; obligatory/ optional work placement; literature survey/ library work; data collection/ field work; writing of papers/ projects/dissertation/thesis; seminars, etc.)

Course Objectives:

- To acquaint the scholars with the concepts of ICTs
- To explore the applications of ICT tools and services in LIS research
- To make scholars familiar with the various sources useful to conduct research
- To develop skills in searching and organisation of digital information
- To know the select data analysis tools

Attendance Requirements:
Students are expected to attend all lectures in order to be able to fully benefit from the course. A minimum of 75% attendance is a must failing which a student may not be permitted to appear in examination.

Evaluation Criteria:

- Mid Term Examination: 25%
- End Term Examination: 50%
- Continuous Internal Assessment: 25%
- Assignment/Library Work/Class Test/Surprise Test/Quiz: 15%
- Class Attendance: 10%

Course Content:

UNIT I: ICTs - The Basics and the Trends

- User hardware – Personal Computers, Notebooks, New generation cell phones
- Software – Open source software, Proprietary software
- Communication technology – Cables, Wireless, Cell phone technology
- Social software, Cloud computing, Digital natives vs. Digital immigrants

UNIT II: Web Resources and Services for research

- Use of Internet for Research Purpose, Search engines, Academic search engines, Google Scholar
- Search Strategy and Techniques, Federated Search Systems
- Open access web resources for research – DOAJ, DOAB, Kopernio, Unpaywall, InTech, CiteSeerX, ERIC, E-LIS-Eprints, Trove, NDLTD, ShodhGanga, e-ShodhSindhu, Vidwan,

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Website: www.cuhimachal.ac.in

आज़ादी का अमृत महोत्सव

356

File No.:-LIS/1-5/CUHP/15/26

Date:-10-12-2021

MINUTES OF THE 7th BOARD OF STUDIES MEETING HELD ON 10th DECEMBER, 2021 *(through Circulation mode)*

The meeting of the **7th Board of Studies** of the **Department of Library and Information Science,** School of Mathematics, Computer and Information Sciences, Central University of Himachal Pradesh, Shahpur Parisar, Shahpur was held through **Circulation** mode on **10th December,2021.**

The **Department** circulated the following **agenda items** of the **meeting** to all members of the Board of Studies of the Department of Library and Information Science and decided as under:-

AGENDA ITEM NO.- LIS-BOS-7/21-1

To confirm the minutes of the 6th Meeting of BOS of the Department of Library and Information Science held by circulation on 30th July,2021 attached as Annexure – I.

Decision:

The Minutes of the 6th meeting of the BoS were Confirmed and Approved attached as Annexure – I.

AGENDA ITEM NO.- LIS-BOS-7/21-2

Approval of the Change of Research Supervisor/Guide of Mr. Nimmal Karunakar,Ph.D. Scholar, Roll No. CUHP15RDLIS02 (2015 Batch) due to the demise of his previous Research Supervisor, Prof. I.V. Malhan.

Decision:

All members unanimously agreed and approved the following faculty member as Supervisor/Guide of Mr. Nimmal Karunakar, Ph.D. Scholar, Roll No. CUHP15RDLIS02 (2015 Batch)

Sr. No.	University Roll No.	Name	Father Name	Supervisor Name
1.	CUHP15RDLIS02	Mr.Nimmala Karnuakar	Sh.Nimmala Ashok	Dr. Shivarama Rao K

AGENDA ITEM NO.- LIS-BOS-7/21-3

(357)

Approval of the Change of Research Supervisor/Guide of Mr. Vimlesh Patel, Ph.D. Scholar, Roll No. CUHP17RDLIS01 (2017 Batch) due to the demise of his previous Research Supervisor, Prof. I.V. Malhan.

Decision:

All members unanimously agreed and approve the following faculty member as Supervisor/Guide of Mr. Vimlesh Patel, Ph.D. Scholar, Roll No. CUHP17RDLIS01 (2017 Batch)

Sr. No.	University Roll No.	Name	Father Name	Supervisor Name
1.	CUHP17RDLIS01	Mr. Vimlesh Patel	Sh. Ganesh Ram Patel	Dr. Shivarama Rao K

All members have approved the minutes via e-mail. (Enclosed.)

Dr. Dimple Patel
Chairperson & Convener

Department of Library and Information Science
Central University of Himachal Pradesh

Programme of Study: Doctor of Philosophy (Ph.D.) in Library and Information Science

Coursework
(2021-22)

SN	Course Code	Name of the Course	Credit	Level
1.	LIS-601	Research Methodology in Library and Information Science	4	6
2.	LIS-602	ICT Applications in Library and Information Services	4	6
3.	LIS-603	Micro research study	4	6
4.	LIS-604	Indian Knowledge Organization Systems	2	6
5.	RPE	Research and Publication Ethics (RPE)	2	6
6.	PTLP	Pedagogy of Teaching-Learning Process	2	6
		Total Credits	**18**	

पत्रांक संख्या० सीओई/2-2/हिप्रकेवि/2021/1171
हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय
Central University of Himachal Pradesh
परीक्षा नियंत्रक कार्यालय/ Office of the Controller of Examination

धर्मशाला – 176215 20 जुलाई, 2021

सेवा में

विभागाध्यक्ष
पुस्तकालय एवं सूचना विज्ञान विभाग,
हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय
अस्थाई शैक्षणिक खण्ड, शाहपुर,
जिला काँगड़ा, हिमाचल प्रदेश- 176206 |

विषयः श्रीमती नवनीत कौर, CUHP18RDLIS01, शोधार्थी, पुस्तकालय एवं सूचना विज्ञान विभाग के कोर्स वर्क के सम्बन्ध में |

महोदया,

क. कृप्या उपरोक्त विषय के सम्बन्ध में अधोहस्ताक्षरी के कार्यालय से प्रेषित पत्र संख्या० सीओई/1-1/हिप्रकेवि/18/11629-30 दिनांक 22.06.2021 तथा प्रत्युत्तर में आपके विभाग से प्राप्त पत्र संख्या LIS/1-2/CUHP/20/28 दिनांक 30.06.2021 का सन्दर्भ ग्रहण करें |

ख. श्रीमती नवनीत कौर, CUHP18RDLIS01, शोधार्थी, पुस्तकालय एवं सूचना विज्ञान विभाग के कोर्स वर्क के सम्बन्ध में माननीय कुलपति महोदय द्वारा निम्नलिखित निर्देश प्रदान किये हैं:

i) Course Code LIS-401 answer book should be gotten evaluated from the Dept. at the earliest |
ii) Internal Assessment of LIS-401 & LIS-509 should be submitted by the Dept. at the earliest |

इस सम्बन्ध में आपसे अनुरोध है कि माननीय कुलपति महोदय के निर्देशानुसार कार्यवाही अमल में लायें |

परीक्षा नियंत्रक

प्रतिः
1. कुलपति के निजी सचिव, माननीय कुलपति महोदय के सूचनार्थ |

परीक्षा नियंत्रक 20/7/21

हिमाचल प्रदेश केंद्रीय विश्वविद्यालय

Central University of Himachal Pradesh

(Established under Central Universities Act 2009)

अस्थाई शैक्षणिक खण्ड, शाहपुर, ज़िला काँगड़ा, हिमाचल प्रदेश - 176206

Temporary Academic Block, Shahpur, Distt. Kangra (HP) - 176206

Website: www.cuhimachal.ac.in

File No. LIS/1-2/RD/CUHP/18/*55-57*

Dated: *23.07.2021*

CIRCULAR

The following **Committee** is **constituted** to look into the matter of **Evaluation** of the **Answer Sheet** of **End Term Examination** and **Internal Assessment** as per **CUHP rules** for the **Course Code: LIS-401** of the **Course Work** of **Ms. Navneet Kaur, CUHP19RDLIS01**, Ph.D. Scholar in the **Department of Library and Information Science**, School of Mathematics, Computers and Information Sciences.

1. **Dr. Shivarama Rao K.**, Assosicate Professor, Department of Library and Information Science.
2. **Dr. Pawan Kumar Saini**, Assistant Professor, Department of Library and Information Science.

The **committee** will **submit** their **final report** within **01 week** from the **date** of the **issuance** of this **circular**.

Dr. Dimple Patel,
Head,
Department of Library and Information Science

Copy to:

1. Individual Concerned.

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Website: www.cuhimachal.ac.in

File No

Dated: 30/07/2021

To

The Controller of Examination
Central University of Himachal Pradesh
PO Box 21 Dharamshala
Kangra-176215, HP

(Through proper channel)

Subject: ***Submission of Award list and Answer sheets (LIS 401 Ph. D. Course work)***

Sir

With the reference letter no. file no. COE/2-2CUHP2021/11744-45. Please find enclosed End Term Examination 2019 Results and awards. The documents following enclosed:

1. Award List of End Term Examination 2019
2. Award Lists of Internal Assessment LIS 401 & LIS 509
3. Attendance sheet, and Question paper LIS 401
4. Answer sheet of End Term Examination 2019 -One

Thanking you

Yours sincerely

30/7/21 30/7/2021

Central University of Himachal Pradesh
TAB Shahpur -Kangra

Head of Department
Library and Information Science
Central University of Himachal Pradesh
TAB Shahpur -Kangra

Endorsement No:- LIS/1-3/ Gen. Corr./CUHP/21/83 dated 03.08.2021

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PO BOX: 21, DHARAMSHALA, DISTRICT KANGRA – 176215, HIMACHAL PRADESH
Website www.cuhimachal.ac.in

File No

Dated: 30/07/2021

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Central University of Himachal Pradesh
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2. Award Lists of Internal Assessment LIS 401 & LIS 509
3. Attendance sheet, and Question paper LIS 401
4. Answer sheet of End Term Examination 2019 -One

Thanking you

Yours sincerely

30/7/21

30/7/2021

Central University of Himachal Pradesh
TAB Shahpur -Kangra

Head of Department
Library and Information Science
Central University of Himachal Pradesh
TAB Shahpur -Kangra

Endorsement No:- LIS/1-3/ Gen. Corr./CUHP/21/339 dated 03.08.2021

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Central University of Himachal Pradesh

F.No. Dir(Research)/2-7/CUHP/18/1962-04 Dated: 03.09.2018

सेवा में

विभागाध्यक्ष
पुस्तकालय एवं सूचना विज्ञान विभाग
हिमाचल प्रदेश केंद्रीय विश्वविद्यालय
शाहपुर परिसर, शाहपुर
जिला काँगड़ा, हिमाचल प्रदेश

विषय: श्रीमती नवनीत कौर, CUHP18RDLIS01, शोधार्थी, पुस्तकालय एवं सूचना विभाग के कोर्स वर्क के सम्बन्ध में।

महोदया,

क. कृपया उपरोक्त विषय का संदर्भ ग्रहण करें।

ख. अतः इस संदर्भ में माननीय कुलपति महोदय से प्राप्त अनुमोदन के आधार पर सम्बन्धित विभाग से इस मामले को शोध परामर्श समिति, बोर्ड ऑफ़ स्टडीज, स्कूल बोर्ड, अकादमिक परिषद तथा कार्यकारिणी परिषद में प्रस्तुत करने का अनुरोध है ताकि शोधार्थी के भविष्य को ध्यान में रखते हुए नियमों का पालन करते हुए उचित निर्णय लिया जा सके।

शोध निदेशक
3/9/18

प्रति:

1. कुलपति के निजी सचिव, माननीय कुलपति महोदय के सूचनार्थ।
2. परीक्षा नियंत्रक, हि. प्र. के. वि.

शोध निदेशक
3/9/18

F.No : Dir.(Research)/2-7/CUHP/16/

हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय
Central University of Himachal Pradesh
Department of New Media

आज़ादी का अमृत महोत्सव

धर्मशाला -176215 दिनांक : 29.12.2021

सेवा में

नवनीत कौर
शोधार्थी, पुस्तकालय और सूचना विज्ञान विभाग
हिमाचल प्रदेश केंद्रीय विश्वविद्यालय
शाहपुर परिसर – शाहपुर
176206

विषय: पीएचडी के कोर्स वर्क का परिणाम घोषित नही होने हेतु |

महोदया |

1. कृपया उपरोक्त विषय का संदर्भ ग्रहण करें |
2. उपरोक्त के संदर्भ में शोध कार्यालय से जारी पत्र संख्या: **Dir.(Research)/2-7/CUHP/16/1902-04 दिनांक: 03.09.2021** के अनुसार माननीय कुलपति महोदय जी से प्राप्त अनुमोदन के आधार पर सम्बन्धित विभाग से इस मामले को शोध परामर्श समिति, बोर्ड ऑफ़ स्टडीज, स्कूल बोर्ड, अकादमिक परिषद् तथा कार्यकारिणी परिषद् में प्रस्तुत करने का अनुरोध था |
3. अतः इस संदर्भ में शोध निदेशक कार्यालय से पहले ही स्पष्ट किया जा चूका है कि इस मामले में आगे की कार्यवाही सम्बन्धित विभाग द्वारा ही की जाएगी |

प्रो. प्रदीप नायर
शोध निदेशक

प्रति :

1. डॉ. डिंपल पटेल, विभागाध्यक्ष, पुस्तकालय और सूचना विज्ञान विभाग, हि.प्र.के.वि, शाहपुर परिसर |
2. परीक्षा नियंत्रक, प्रशासनिक ब्लॉक, हि.प्र.के.वि, धर्मशाला |

प्रो. प्रदीप नायर
शोध निदेशक

Central University of Himachal Pradesh

[Established under Central Universities Act 2009]
PO Box 21, Dharamshala, District Kangra, Himachal Pradesh [India]-176215
Tel: 01892-229330, 237285, Fax: 01892-229331,
Website: www.cuhimachal.ac.in

Course Code: **LIS 604**

Course Name: **IKS Based Approaches in LIS**

Credits Equivalent: 2 Credits (One credit is equivalent to 10 hours of lectures / organized classroom activity / contact hours; 5 hours of laboratory work / practical / field work / Tutorial / teacher-led activity and 15 hours of other workload such as independent individual/ group work; obligatory/ optional work placement; literature survey/ library work; data collection/ field work; writing of papers/ projects/dissertation/thesis; seminars, etc.)

Course Objectives:

- To provide students a broad understanding about the Indian Knowledge Systems and Knowledge based tradition of India
- To provide students the information about IKS based approaches in the library and information science
- To provide the students an insight into Indian Sciences in order to make them able to conceptualize creative ideas for research.

Course Outcomes:

After the successful completion of this course, the student will be able to:
CO-1. Acquire the necessary and important information about IKS
CO-2. IKS and its nature which has been already discovered, experimented and verified by Indian Intellectuals a long back.
CO-3. Know about Traditional Knowledge Systems of India
CO-4. Know about IKS based approaches in the library and information science

Attendance Requirements:

Students are expected to attend all lectures in order to be able to fully benefit from the course. A minimum of 75% attendance is a must failing which a student may not be permitted to appear in examination.

Evaluation Criteria:

- Mid Term Examination: 25%
- End Term Examination: 50%
- Continuous Internal Assessment: 25%
- Assignment/Library Work/Class Test/Surprise Test/Quiz: 15%
- Class Attendance: 10%

Course Content:

UNIT I: Introduction to Indian Knowledge Systems

- Indian Knowledge Systems
- Indian Knowledge Tradition
- Assumptions, models and methods of IKS
- Universe of Knowledge: Principle of Social Purpose

UNIT II: Introduction to Culture

- Indian Culture – Value systems
- Introduction to Ancient India, Medieval India, Modern India
- Education in ancient India
- Information Communication in Ancient India

UNIT III: Seats of learning in the ancient Indian subcontinent

- Takshasila & Nalanda Libraries
- Influence of Indian knowledge to civilization
- Traditional Knowledge Systems of India
- Sources of IKS knowledge & Classification of IKS texts

UNIT IV: IKS based approaches in LIS

- Five laws of library science and Manu's Dharmasatra
- Canons of knowledge organization
- Knowledge organization in Colon classification
- Fundamental categories, APUPA, POPSI and Chain Indexing
- Karma Yoga and Ranganathan

Prescribed Reading List:

1. B Mahadevan, V R Bhat & Nagendra Pavana. 2022. An Introduction to Indian Knowledge Systems: Concepts & Applications, Prentice Hall of India
2. Agrawal, Madan Mohan (ed.) 2001. Six Systems of Indian Philosophy: The sutras of Six Systems of Indian Philosophy with English translation, Translation, Transliteration, and Indices. Chaukhamba Sanskrit Pratishthan, Varanasi.
3. Aurobindo, Sri (ed.) 1997. The Renaissance in India and other Essay, Pondichery, Sri Aurobindo Ashram.
4. Basham, A.L. (ed.) 1975. A Cultural History of India, New Delhi, Oxford University Press.
5. Kapoor, Kapil, Avadesh Kr. Singh (eds.) 2005. Indian Knowledge Systems (Two Vols), IIAS, Shimla.

6. Sanskriti, https://www.sanskritimagazine.com/india/traditional-knowledge-systems-of-india/
7. Philosophies of India by Heinrich Zimmer, Routledge & Kegan Paul Ltd, 1952
8. Ranganathan, SR. 1931. The Five Laws of Library Science
9. Ranganathan, SR. 1967. Prolegomena to Library Classification, 3rd ed.
10. Ranganathan, SR. 1951. Philosophy of Library Classification
11. Ranganathan, SR. 1967. Ramanujan: The man and the mathematician

Course Outcomes	Programme Outcomes 1	Programme Outcomes 2	Programme Outcomes 3	Programme Outcomes 4	Programme Specific Outcomes 1	Programme Specific Outcomes 2	Programme Specific Outcomes 3
CO1	1	1	2	3	2	2	1
CO2	1	1	2	3	2	2	1
CO3	3	1	3	3	3	1	1
CO4	3	1	3	3	2	2	1

1. Partially Related
2. Moderately Related
3. Highly Related

Central University of Himachal Pradesh

Department of Library and Information Science

School of Mathematics, Computers and Information Sciences

AGENDA

1ST RESEARCH DEGREE COMMITTEE (RDC) MEETING

TO BE HELD ON 29th December, 2022 through Online Mode on Google Meet (https://meet.google.com/yjy-djrm-dxy)

Venue: Seminar Hall, Central University of Himachal Pradesh, Shahpur Parisar, Shahpur, Distt. Kangra (HP)

हिमाचल प्रदेश केंद्रीय विश्वविद्यालय

Central University of Himachal Pradesh

(Established under Central Universities Act 2009)

शाहपुर परिसर, शाहपुर, ज़िला काँगड़ा (हि.प्र.) - 176206

ShahpurParisar, Shahpur, Distt. Kangra (HP) - 176206

Website: www.cuhimachal.ac.in

AGENDA-INDEX

Agenda Item No.	PARTICULARS	Information
DLIS-RDC-1/22-1	To approve the Research Supervisors to the newly admitted Ph.D. Students of 2021 batch allotted by the Departmental Standing Committee (DSC).	Annexure –I
DLIS-RDC-1/22-2	To approve the allotment of Research Supervisors to Mr. Abhinandan, Roll No. CUHP20RDLIS01, and Mr. Vishal, CUHP20RDLIS05 by the Departmental Standing Committee (DSC).	Annexure–II
DLIS-RDC-1/22-3	To review the research progress of Mr. Abhinandan, Roll No. CUHP20RDLIS01 to make recommendations for upgradation from JRF to SRF effective from 09.11.2022.	Annexure –III
DLIS-RDC-1/22-4	To review the Research Proposal, finalize the Topic of Research and approve the Research Synopsis of Mr. Vimlesh Patel, Roll No. CUHP17RDLIS01 as per the recommendations of the Departmental Research Committee (DRC).	Annexure –IV
DLIS-RDC-1/22-5	To review the Research Proposal, finalize the Topic of Research and approve the Research Synopsis of Mr. Abhinandan, Roll No. CUHP20RDLIS01 as per the recommendations of the Departmental Research Committee (DRC).	Annexure –V
DLIS-RDC-1/22-6	To review the Research Proposal, finalize the Topic of Research and approve the Research Synopsis of Ms. Akanksha Parmar, Roll No. CUHP20RDLIS02 as per the recommendations of the Departmental Research Committee (DRC).	Annexure –VI
DLIS-RDC-1/22-7	To review the Research Proposal, finalize the Topic of Research and approve the Research Synopsis of Ms. Priya, Roll No. CUHP20RDLIS03 as per the recommendations of the Departmental Research Committee (DRC).	Annexure –VII
DLIS-RDC-1/22-8	To review the Research Proposal, finalize the Topic of Research and approve the Research Synopsis of Mr. Vikramjeet, Roll No. CUHP20RDLIS04 as per the recommendations of the Departmental Research Committee (DRC)	Annexure –VIII
DLIS-RDC-1/22-9	To review the Research Proposal, finalize the Topic of Research and approve the Research Synopsis of Ms. Sakshi Devi, Roll No. CUHP21RDLIS02 as per the recommendations of the Departmental Research Committee (DRC).	Annexure –IX
DLIS-RDC-1/22-10	To review the Research Proposal, finalize the Topic of Research and approve the Research Synopsis of Ms. Poonam Chandel, Roll No. CUHP21RDLIS01 as per the recommendations of the Departmental Research Committee (DRC).	Annexure –X
DLIS-RDC-1/22-11	To approve the List of Examiners for Ph.D.	Annexure –XI
DLIS-RDC-1/22-12	To approve the release of the result of Ph.D. Coursework of Ms. Navneet Kaur (Roll No. CUHP18RDLIS01 and continue her research in Ph.D. programme.	Annexure –XII
DLIS-RDC-1/22-13	Any other item with the permission of the Chair.	

Head,

Department of Library and Information Science

हिमाचल प्रदेश केंद्रीय विश्वविद्यालय
Central University of Himachal Pradesh
(Established under Central Universities Act 2009)
शाहपुर परिसर, शाहपुर, ज़िला काँगड़ा (हि.प्र.) - 176206
Shahpur Parisar, Shahpur, Distt. Kangra (HP) - 176206
Website: www.cuhimachal.ac.in

File No.: LIS/1-13/RDC/CUHP/21/*331* **Dated:** *29.12.2022*

MINUTES OF THE MEETING

The **meeting** of the **1st Research Degree Committee (RDC)** of the **Department of Library and Information Science**, School of Mathematics, Computers and Information Sciences, Central University of Himachal Pradesh, Shahpur Parisar, Shahpur was held on **29thDecember, 2022** at **10:00 AM** onwards through online mode on **Google Meet** (https://meet.google.com/yjy-djrm-dxy) in the **Seminar Hall** of the Central University of Himachal Pradesh, Shahpur Parisar, Shahpur. **Dr. Dimple Patel,** Dean, School of Mathematics, Computers and Information Sciences **chaired** the meeting.

The following members attended the meeting through offline mode:-

1. **Dr. Dimple Patel –Chairperson**
   Dean, School of Mathematics, Computers and Information Sciences, & Head, Department of Library and Information Science, Central University of Himachal Pradesh, Shahpur Parisar, Shahpur.
2. **Dr. Shivarama Rao K. - Member**
   Associate Professor, Department of Library and Information Science, Central University of Himachal Pradesh, Shahpur Parisar, Shahpur.

The following members attended the meeting through online mode on Google meet (https://meet.google.com/yjy-djrm-dxy):-

1. **Prof. K.P. Singh – External Expert**
   Department of Library and Information Science, University of Delhi, Delhi.
2. **Prof. Joginder Singh - External Expert**
   Department of Library and Information Science, Kurukshetra University, Thanesar, Haryana
3. **Prof. Harinder Pal Singh Kalra - External Expert**
   Department of Library and Information Science, Punjabi University, Patiala

The following member could not attend the meeting due to his pre-committed assignments:-

1. **Dr. Pawan Kumar Saini - Member**
   Assistant Professor, Library and Information Science, SoSS, IGNOU, New Delhi

The **Chairperson** welcomed all the **Hon'ble members** of the **RDC** and **briefed** about the various **agenda items** to be **discussed** in the **meeting** which were **sent** in **advance** to all the members through **e-mail** including **External Experts**. After **detailed discussions** and **deliberations** on each **Agenda** item, the **following decisions** were taken:-

AGENDA ITEM NO. - DLIS-RDC-1/22-1

To approve the Research Supervisors to the newly admitted Ph.D. Students of 2021 batch allotted by the Departmental Standing Committee (DSC).

Decision:

The Research Supervisors allotted to the newly admitted Ph.D. Students of 2021 batch by the Departmental Standing Committee (DSC) were discussed and approved by the all respective members of the RDC as attached at Annexure-I.

AGENDA ITEM NO. - DLIS-RDC-1/22-2

To approve the allotment of Research Supervisors to Mr. Abhinandan, Roll No. CUHP20RDLIS01, and Mr. Vishal, CUHP20RDLIS05 by the Departmental Standing Committee (DSC).

Decision:

The allotment of the Research Supervisors to Mr. Abhinandan, Roll No. CUHP20RDLIS01, and Mr. Vishal, CUHP20RDLIS05 were discussed and approved (Annexure-II).

AGENDA ITEM NO. - DLIS-RDC-1/22-3

To review the research progress of Mr. Abhinandan, Roll No.CUHP20RDLIS01 to make recommendations for upgradation from JRF to SRF effective from 09.11.2022.

Decision:

The Research Progress of Mr. Abhinandan, Roll No. CUHP20RDLIS01 was reviewed, and committee recommended the case of Mr. Abhinandan, Roll No. CUHP20RDLIS01 for upgradation from JRF to SRF (Annexure-III).

AGENDA ITEM NO. - DLIS-RDC-1/22-4

To review the Research Proposal, finalize the Topic of Research and approve the Research Synopsis of Mr. Vimlesh Patel, Roll No. CUHP17RDLIS01 as per the recommendations of the Departmental Research Committee (DRC).

Decision:

The Research Proposal of Mr. Vimlesh Patel, Roll No. CUHP17RDLIS01 was reviewed on the basis of presentation made by Mr. Vimlesh Patel, and "Research Productivity of select Indian Institutes of Technology (IITs) and National Institutes of Technology (NITs) of India: A Scientometric Study" was finalized as Topic of Research (Annexure-IV).

AGENDA ITEM NO. - DLIS-RDC-1/22-5

To review the Research Proposal, finalize the Topic of Research and approve the Research Synopsis of Mr. Abhinandan, Roll No. CUHP20RDLIS01 as per the recommendations of the Departmental Research Committee (DRC).

Decision:

The Research Proposal of Mr. Abhinandan, Roll No. CUHP20RDLIS01was reviewed on the basis of presentation made by Mr. Abhinandan, and "Knowledge Organization in Massive Open Online Courses (MOOCs) Domain: an Ontological and Faceted approach" was finalized as Topic of Research (Annexure-V).

AGENDA ITEM NO. - DLIS-RDC-1/22-6

To review the Research Proposal, finalize the Topic of Research and approve the Research Synopsis of Ms. AkankshaParmar, Roll No. CUHP20RDLIS02 as per the recommendations of the Departmental Research Committee (DRC).

Decision:

The Research Proposal of Ms. Akanksha Parmar, Roll No. CUHP20RDLIS02was reviewed on the basis of presentation made by Ms. Akanksha Parmar, and "Health Information Resources and Information Seeking Behavior of Rural Communities: A Study of Kangra Valley of Western Himalayas" was finalized as Topic of Research (Annexure-VI).

AGENDA ITEM NO. - DLIS-RDC-1/22-7

To review the Research Proposal, finalize the Topic of Research and approve the Research Synopsis of Ms. Priya, Roll No. CUHP20RDLIS03 as per the recommendations of the Departmental Research Committee (DRC).

Decision:

The Research Proposal of Ms. Priya, Roll No. CUHP20RDLIS03 was reviewed on the basis of presentation made by Ms. Priya, and "Information Needs and Seeking Behavior of Farmers of Hilly Terrain: A Study of Select Districts of Shivalik Region of Himachal Pradesh" was finalized as Topic of Research (Annexure-VII).

AGENDA ITEM NO. - DLIS-RDC-1/22-8

To review the Research Proposal, finalize the Topic of Research and approve the Research Synopsis of Mr. Vikramjeet, Roll No. CUHP20RDLIS04 as per the recommendations of the Departmental Research Committee (DRC).

Decision:

The Research Proposal of Mr. Vikramjeet, Roll No. CUHP20RDLIS04 was reviewed on the basis of presentation made by Mr. Vikramjeet, and "Information Literacy of Faculty Members and Research Scholars of Central Sanskrit University: A Case Study" was finalized as Topic of Research (Annexure-VIII).

AGENDA ITEM NO. - DLIS-RDC-1/22-9

To review the Research Proposal, finalize the Topic of Research and approve the Research Synopsis of Ms. Sakshi Devi, Roll No. CUHP21RDLIS02 as per the recommendations of the Departmental Research Committee (DRC).

Decision:

The Research Proposal of Ms. Sakshi Devi, Roll No. CUHP21RDLIS02 was reviewed on the basis of presentation made by Ms. Sakshi Devi, and "An ontological approach to organize the Intangible Cultural Heritage (ICH) Practices and Indigenous Knowledge of *Gaddi* community in Himachal Pradesh" was finalized as Topic of Research (Annexure-IX).

AGENDA ITEM NO. - DLIS-RDC-1/22-10

To review the Research Proposal, finalize the Topic of Research and approve the Research Synopsis of Ms. Poonam Chandel, Roll No. CUHP21RDLIS01 as per the recommendations of the Departmental Research Committee (DRC).

Decision:

The Research Proposal of Ms. Poonam Chandel, Roll No. CUHP21RDLIS01 was reviewed on the basis of presentation made by Ms. Poonam Chandel, and "Use and Impact of Open Educational Resources: A Comparative Study of Select Higher Education Institutions of Himachal Pradesh" was finalized as Topic of Research (Annexure-X).

AGENDA ITEM NO. -DLIS-RDC-1/22-11

To approve the List of Examiners for Ph.D.

Decision:

All members agreed and approved the list of Examiners for the Evaluation of Ph.D. Degree of Mr. Vimlesh Patel, CUHP17RDLIS01 as proposed atAnnexure XI.

AGENDA ITEM NO. - DLIS-RDC-1/22-12

To approve the release of the result of Ph.D. Coursework of Ms. Navneet Kaur (Roll No.CUHP18RDLIS01 and continue her research in Ph.D. programme.

Decision:

All members agreed and approved that the result of Ph.D. Course work of Ms. Navneet Kaur (Roll No. CUHP18RDLIS01) should be declared and she should be allowed to continue her research in Ph.D. Programme.

AGENDA ITEM NO. - DLIS-RDC-1/22-13

Any other item with the permission of the Chair

Decision: No item was taken.

The meeting ended with a vote of thanks to the chair.

Dr. Shivarama Rao K.
(Member & Research Supervisor)

Approved through e-mail
Prof. K.P. Singh
(External Expert)

Approved through e-mail
Prof. Joginder Singh
(External Expert)

Approved through e-mail
Prof. Harinder Pal Singh Kalra
(External Expert)

Dr. Dimple Patel
Head, DLIS, & **Dean**
(Research Supervisor & Chairperson)

Gmail Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in>

Regarding Minutes of the 1st RDC meeting of DLIS

6 messages

Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in> Thu, Dec 29, 2022 at 6:57 PM
To: kpsingh330@gmail.com, hpskalra8@gmail.com, jsburman69@gmail.com
Cc: surjeet Kumar <ssharmacuhp@hpcu.ac.in>, "Head, DLIS CUHP" <hod_lisc@hpcu.ac.in>, Dimple Patel <dimple@hpcu.ac.in>, "Dean Mathematics, Computer & Information Sciences" <dean_smcis@hpcu.ac.in>

Complete Minutes of the 1st RDC meeting of DLIS...

Respected Sir(s),
Please find attached herewith the **Minutes of the 1st Research Degree Committee (RDC) meeting** of the **Department of Library and Information Science,** School of Mathematics, Computers and Information Sciences, Central University of Himachal Pradesh, Shahpur Parisar, Shahpur.

You are **requested** to **check** the attached **files** and **approve** the same (through e-mail), if no changes are required.

धन्यवाद/Thanking you

सादर/regards,

गौरव चम्बयाल/GOURAV CHAMBYAL
डाटा एंट्री ऑपरेटर/Data Entry Operator
गणित, कंप्यूटर एवं सूचना विज्ञान स्कूल/School of Mathematics, Computers and Information Science

हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय/Central University of Himachal Pradesh

शाहपुर परिसर, शाहपुर/Shahpur Parisar, Shahpur
मोबाइल/Mobile: +91- 9418555980

ई-मेल/ E-mail: gourav.cuhimachal@hpcu.ac.in

Harinder Pal Singh Kalra <hpskalra9@gmail.com> Thu, Dec 29, 2022 at 8:32 PM
To: Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in>

Minutes approved.

HPS Kalra
[Quoted text hidden]

Dr. KP Singh <kpsingh330@gmail.com> Fri, Dec 30, 2022 at 5:52 AM
To: Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in>

Dear Sir,
PFA...

Complete Minutes of the 1st RDC meeting of DLIS...

Regards,

Prof. KP Singh

Practicing Librarian, Educationist, Teacher, Teacher Activist, Academic Administrator, Researcher & Author.

Currently Professor at Department of Library & Information Science @ DU

Director, Gandhi Bhawan, University of Delhi (2022-)

Provost, PG Men's Hostel, University of Delhi (2022-)

President, Delhi Library Association (2022-)

Member, GB- INFLIBNET Centre (2021-), Kirori Mal College (2021), Chacha Nehru Bal Chikitsalaya (2022-)

Editor, WE-Multidisciplinary and Multilingual Peer-Reviewed Research Journal and VEETHIKA-An International Interdisciplinary Journal

Member- Editorial Board, UDC, JLIS, Library Herald, IJKCDT, Gyankosh, PLOS, KPS, etc.

Coordinator, DLIS@DU (2017-2019) & Academic and Cultural Affairs, Faculty of Arts @DU

Former Secretary (Media), National Democratic Teachers' Front (NDTF)

Founder President-SR Foundation for Library and Information Science (SRFLIS)

Former General Secretary- Delhi Library Association (2015-2022)

Former Treasurer- Delhi Library Association (2012-2015)

Former Sr. Vice-President- Delhi Library Association (2009-2012)

Member- Two Times Elected Academic Council, University of Delhi (2015-2019)

Organizing Secretary- 'SRFLIS Summit-2014, 2015, 2019' International Conference

[Quoted text hidden]
--

Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in> Fri, Dec 30, 2022 at 9:31 AM
To: Dimple Patel <dimple@hpcu.ac.in>, "Dean Mathematics, Computer & Information Sciences" <dean_smcis@hpcu.ac.in>, "Head, DLIS CUHP" <hod_lisc@hpcu.ac.in>
Cc: surjeet Kumar <ssharmacuhp@hpcu.ac.in>

धन्यवाद/Thanking you

सादर/regards,

गौरव चम्बयाल/GOURAV CHAMBYAL
डाटा एंट्री ऑपरेटर/Data Entry Operator
गणित, कंप्यूटर एवं सूचना विज्ञान स्कूल/School of Mathematics, Computers and Information Science

हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय/Central University of Himachal Pradesh

शाहपुर परिसर, शाहपुर/Shahpur Parisar, Shahpur
मोबाइल/Mobile: +91- 9418555980

ई-मेल/ E-mail: gourav.cuhimachal@hpcu.ac.in

[Quoted text hidden]

---

joginder Singh <jsburman69@gmail.com> Fri, Dec 30, 2022 at 9:47 AM
To: Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in>

DearSir/Madam,
Approved as discussed in the meeting

Thanks & Regards

On Thu, 29 Dec 2022 at 18:57, Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in> wrote:
[Quoted text hidden]

--
Dr.Joginder Singh
Professor
Deptt. of Lib. and Inf. Sc.
Kurukshetra University,
Kurukshetra-136119.
HARYANA (INDIA)
91-99963 48192

Dr. KP Singh <kpsingh330@gmail.com> Fri, Dec 30, 2022 at 9:50 AM
To: Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in>

Approved

Prof. KP Singh

Practicing Librarian, Educationist, Teacher, Teacher Activist, Academic Administrator, Researcher & Author.

Currently Professor at Department of Library & Information Science @ DU

Director, Gandhi Bhawan, University of Delhi (2022-)

Provost, PG Men's Hostel, University of Delhi (2022-)

President, Delhi Library Association (2022-)

Member, GB- INFLIBNET Centre (2021-), Kirori Mal College (2021), Chacha Nehru Bal Chikitsalaya (2022-)

Editor, WE-Multidisciplinary and Multilingual Peer-Reviewed Research Journal and VEETHIKA-An International Interdisciplinary Journal

Member- Editorial Board, UDC, JLIS, Library Herald, IJKCDT, Gyankosh, PLOS, KPS, etc.

Coordinator, DLIS@DU (2017-2019) & Academic and Cultural Affairs, Faculty of Arts @DU

Former Secretary (Media), National Democratic Teachers' Front (NDTF)

Founder President-SR Foundation for Library and Information Science (SRFLIS)

Former General Secretary- Delhi Library Association (2015-2022)

Former Treasurer- Delhi Library Association (2012-2015)

Former Sr. Vice-President- Delhi Library Association (2009-2012)

Member- Two Times Elected Academic Council, University of Delhi (2015-2019)

Organizing Secretary- 'SRFLIS Summit-2014, 2015, 2019' International Conference
[Quoted text hidden]

Annexure-I

-7-

हिमाचल प्रदेश केंद्रीय विश्वविद्यालय

Central University of Himachal Pradesh

(Established under Central Universities Act 2009)

शाहपुर परिसर, शाहपुर, ज़िला काँगड़ा (हि.प्र.) - 176206

Shahpur Parisar, Shahpur, Distt. Kangra (HP) - 176206

Website: www.cuhimachal.ac.in

आज़ादी का अमृत महोत्सव

File No. LIS/1-11/DSC/CUHP/21/ 72 **Dated: 27/05/2022**

MINUTES OF THE MEETING

All the **Committee Members** of the **Departmental Standing Committee (DSC), constituted** for the **period** of **03 years** in the **Department of Library and Information Science,** School of Mathematics, Computers and Information Sciences **met** on **27.05.2022** at **10:30 AM** in the **Seminar Hall,** Central University of Himachal Pradesh, Shahpur Parisar, Shahpur (**Room No. 211**). The faculty members **discussed** the following **agenda items** and **decided** as under:-

Item No.1: To allot Research Supervisors to the newly admitted Ph.D. Students of 2021 batch in the Department of Library and Information Science .

Decision: The Research Supervisors to the newly admitted Ph.D. Students of 2021 batch in the Department of Library and Information Science , School of Mathematics, Computers and Information Sciences are allotted as per Notification attached at Annexure-1.

Dr. Ranjit Kumar
Assistant Professor, and,
PwD Cat. Representative

Dr. Shiwani Berry
Assistant Professor, and,
ST Cat. Representative
Female Representative

Dr. Shivarama Rao K.
Associate Professor and ,
OBC, Cat. Represnative

Prof. Rakesh Kumar
Professor, and
SC Cat. Representative,
Dean,SoMC&IS

Dr.Dimple Patel
Associate Professor and
HoD,Library and Information Science

हिमाचल प्रदेश केंद्रीय विश्वविद्यालय
Central University of Himachal Pradesh
(Established under Central Universities Act 2009)
शाहपुर परिसर, शाहपुर, ज़िला काँगड़ा (हि.प्र.) - 176206
Shahpur Parisar, Shahpur, Distt. Kangra (HP) - 176206
Website: www.cuhimachal.ac.in

आज़ादी का अमृत महोत्सव

File No. LIS/1-11/DSC/CUHP/21/71

Dated: 27/05/2022

अधिसूचना

हिमाचल प्रदेश केंद्रीय विश्वविद्यालय के **अध्यादेश 42**, **धारा 5**, **उपधारा 5.2(iv)** के अनुसार, **पुस्तकालय एवं सूचना विज्ञान विभाग,** गणित, कंप्यूटर और सूचना विज्ञान स्कूल में **पीएच.डी. अध्ययन कार्यक्रम** के **शोधार्थियों** के **पर्यवेक्षण** के लिए निम्नलिखित **संकाय सदस्य** को **अनुसन्धान पर्यवेक्षक** के रूप में **नियुक्त** किया जाता है |

क्र. सं.	शोधार्थी का नाम	पिता का नाम	विश्वविद्यालय रोल नंबर	पर्यवेक्षक का नाम
1.	Poonam Chandel	Jaswant Singh	CUHP21RDLIS01	Dr. Dimple Patel
2.	Sakshi Devi	Kewal Singh	CUHP21RDLIS02	Dr. Dimple Patel
3.	Shivani Thakur	Joginder Singh	CUHP21RDLIS03	Dr. Shivarama Rao, K.

यह अधिसूचना अनुसंधान डिग्री समिति के अनुमोदन के अधीन है |

डॉ रणजीत कुमार
सहायक प्रोफेसर, और,
विकलांग श्रेणी प्रतिनिधि

डॉ शिवानी बैरी
सहायक प्रोफेसर, और,
अनुसूचित जनजाति प्रतिनिधि,

डॉ शिवराम राव के.
सह-प्रोफ़ेसर,और
अन्य पिछड़ा वर्ग प्रतिनिधि

प्रो. राकेश कुमार
प्रोफेसर, एवम् अधिष्ठाता, और,
अनुसूचित जाति प्रतिनिधि

डॉ डिंपल पटेल
सह-प्रोफेसर,और,
विभागाध्यक्ष, पुस्तकालय एवं सूचना विज्ञान विभाग

Annexure-II

हिमाचल प्रदेश केंद्रीय विश्वविद्यालय
Central University of Himachal Pradesh

(Established under Central Universities Act 2009)
शाहपुर परिसर, शाहपुर, ज़िला काँगड़ा (हि.प्र.) - 176206
Shahpur Parisar, Shahpur, Distt. Kangra (HP) - 176206
Website: www.cuhimachal.ac.in

आज़ादी का अमृत महोत्सव

File No. LIS /1-11/DSC/CUHP/21/ 158-167 Dated: 22.9.2022

CIRCULAR

A **meeting** of all **members** of the **Departmental Standing Committee (DSC), constituted** for the **period** of **03 years** in the **Department of Library and Information Science,** School of Mathematics, Computers and Information Sciences is **scheduled** to be **held** on **22.09.2022** at **02:30 PM** in the **Chamber** of the **Head,** Department of Library and Information Science, Central University of Himachal Pradesh, Shahpur Parisar, Shahpur (**Room No. 118**), to **discuss** and **finalize** on the below agenda items:-

1. **To place the request of Mr. Abhinandan, Ph.D. Scholar under Roll No. CUHP20RDLIS01 in the Department of Library and Information Science regarding allotment of the Research Supervisor.**

2. **To place the request of Mr. Vishal Kumar, Ph.D. Scholar under Roll No. CUHP21RDLIS05 in the Department of Library and Information Science regarding allotment of the Research Supervisor.**

The **committee members** shall **perform** their **duties** as **mentioned** in the CUHP, **Ordinance 42, Clause 5.**

Head,
Department of Library and Information Science

Copy forwarded to the following for information and necessary action:-

1) All members of the Department Standing Committee (DSC).
2) The Dean, School of Mathematics, Computers and Information Sciences, Central University of Himachal Pradesh, Shahpur Parisar, Shahpur.
3) The Director Research, Central University of Himachal Pradesh, Dhauladhar Parisar-I, Dharamshala.
4) The Controller of Examinations, Central University of Himachal Pradesh, Dharamshala.
5) Secretary to VC for kind information of the Hon'ble Vice Chancellor, Central University of Himachal Pradesh, Dharamshala.

Head,
Department of Library and Information Science

हिमाचल प्रदेश केंद्रीय विश्वविद्यालय

Central University of Himachal Pradesh

(Established under Central Universities Act 2009)

शाहपुर परिसर, शाहपुर, ज़िला काँगड़ा (हि.प्र.) - 176206

Shahpur Parisar, Shahpur, Distt. Kangra (HP) - 176206

Website: www.cuhimachal.ac.in

आज़ादी का अमृत महोत्सव

File No. LIS/1-11/DSC/CUHP/21/252-255 Dated: 23/11/2022

कार्यालय आदेश

हिमाचल प्रदेश केंद्रीय विश्वविद्यालय के **अध्यादेश 42, धारा 7, उपधारा 7.6** के अनुसार, **पुस्तकालय एवं सूचना विज्ञान विभाग,** गणित, कंप्यूटर और सूचना विज्ञान स्कूल में **पीएच.डी. अध्ययन कार्यक्रम** के **शोधार्थियों** के **पर्यवेक्षण** के लिए निम्नलिखित **संकाय सदस्य** को **अनुसन्धान पर्यवेक्षक** के रूप में **नियुक्त** किया जाता है |

क्र. सं.	शोधार्थी का नाम	पिता का नाम	विश्वविद्यालय रोल नंबर	पर्यवेक्षक का नाम
1.	Abhinandan Kumar	Pratibha Sharan Mishra	CUHP20RDLIS01	Dr. Pawan Kumar Saini, Assistant Professor **(Indira Gandhi National Open University Delhi)**
2.	Vishal	Ved Prakash	CUHP20RDLIS05	

विभागाध्यक्ष

पुस्तकालय एवं सूचना विज्ञान विभाग

यह अधिसूचना अनुसंधान डिग्री समिति के अनुमोदन के अधीन है |

प्रतिलिपि :-

1. पुस्तकालय एवं सूचना विज्ञान विभाग, पीएच.डी. अध्ययन कार्यक्रम के शोधार्थियों एवं संकाय सदस्य के सूचनार्थ हि.प्र.के.वि. शाहपुर परिसर, शाहपुर .
2. निदेशक अनुसंधान हि.प्र.के.वि, के सूचनार्थ. धौलाधार परिसर –I, धर्मशाला.
3. अधिष्ठात,अकादमिक हि.प्र.के.वि, के सूचनार्थ. धौलाधार परिसर –I, धर्मशाल.
4. अधिष्ठाता,गणित,कंप्यूटर एवं सूचना विज्ञान विभाग के सूचनार्थ हि.प्र.के.वि. शाहपुर परिसर, शाहपुर.

Gmail

Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in>

Regarding letter

8 messages

Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in> Tue, Sep 20, 2022 at 11:44 AM
To: "pawankumarsaini@gmail.com" <pawankumarsaini@gmail.com>, ginpawan2008@gmail.com
Cc: surjeet Kumar <ssharmacuhp@hpcu.ac.in>, Dimple Patel <dimple@hpcu.ac.in>, "Head, DLIS CUHP" <hod_lisc@hpcu.ac.in>

Dear Sir,

Please find **attached** herewith the **letter(s)** received from **Mr. Abhinandan, Ph.D. Scholar** under Roll No. **CUHP20RDLIS01,** and **Mr. Vishal, Ph.D. Scholar** under Roll No. **CUHP20RDLIS05** in the **Department of Library and Information Sciences,** Central University of Himachal Pradesh regarding the **allotment** of **Research Supervisor**.

As per **Ordinance 42,** clause 7.6 *"The superannuated teachers along with those who have resigned from CUHP or having lien with CUHP will continue to supervise students already of their own willingness as well as willingness of the concerned candidate. Moreover, such teacher is required to give undertaking with regard to supervision of PhD research work upto its completion. The final decision to allow such teacher to continue supervising PhD research work shall be made by the Vice Chancellor. Otherwise, the research supervisor shall be changed in accordance with provisions under clause 12 of these guideline".*

As per records, you are the **Research Supervisor** of **Mr. Abhinandan,** and **Mr. Vishal** for Ph.D. Degree.

Therefore, you are hereby **requested** to kindly give your **consent** or give your **necessary comments** to **allotment** of **Research Supervisor** as per **CUHP Ordinance.**

To,

The Head of Department
Department of Library and Information Science
Central University of Himachal Pradesh
TAB, Shahpur, Kangra- 176206

Subject: Regarding completion of my research work under the supervision of my allotted supervisor.

Respected madam,

Most humbly and respectfully I have to say that I, Abhinandan Kumar (CUHP20RDLIS01), was selected for admission in Ph. D. programme under the supervision of Dr. Pawan Kumar Saini (Assistant Professor, DLIS) through F.No.: LIS/1-2/RD/CUHP/2020/45, dated- 27-07-2020. I am conducting my research work under the supervision of Dr. Pawan Kumar Saini. Presently my supervisor is not working in this university but he is supervising my research work. I also want to complete my research work under his supervision. As per the clause 7.6 of the updated Ordinance No.- 42, permission for the same should be granted.

Thus, I request you to kindly recommend and forward my consent application through the proper channel so that I can continue my research work smoothly. I shall remain grateful to you for this.

Date
19-09-2022

Your sincerely
Abhinandan Kumar

Abhinandan Kumar
Research Scholar
(CUHP20RDLIS01)

Subject | Gaurav,
Mail to Dr. Pawan to take his consent to supervise.

द/Thanking you

दर/regards,

गौरव चम्बयाल/GOURAV CHAMBYAL
डाटा एंट्री ऑपरेटर/Data Entry Operator
गणित, कंप्यूटर एवं सूचना विज्ञान स्कूल/School of Mathematics, Computers and Information Science

हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय/Central University of Himachal Pradesh

शाहपुर परिसर, शाहपुर/Shahpur Parisar, Shahpur
मोबाइल/Mobile: +91- 9418555980

ई-मेल/ E-mail: gourav.cuhimachal@hpcu.ac.in

---

2 attachments

Letter of Mr Vishal regarding allotment of supervisor.pdf
1028K

Letter of Mr Abhinandan regarding allotment of supervisor.pdf
975K

Mail Delivery Subsystem <mailer-daemon@googlemail.com> Tue, Sep 20, 2022 at 11:44 AM
To: gourav.cuhimachal@hpcu.ac.in

Address not found

Your message wasn't delivered to **ginpawan2008@gmail.com** because the address couldn't be found, or is unable to receive mail.

LEARN MORE

The response was:

```
550 5.1.1 The email account that you tried to reach does not exist. Please try double-
checking the recipient's email address for typos or unnecessary spaces. Learn more at
https://support.google.com/mail/?p=NoSuchUser j13-20020a2eb70d000000b002652497a64dsor180516ljo.53
- gsmtp
```

Final-Recipient: rfc822; ginpawan2008@gmail.com
Action: failed
Status: 5.1.1 ... exist. Please try

To,

The Head of Department
Department of Library and Information Science
Central University of Himachal Pradesh
TAB, Shahpur, Kangra- 176206

Subject: Regarding completion of my research work under the supervision of my allotted supervisor.

Respected madam,

Most humbly and respectfully I have to say that I, Vishal (CUHP20RDLIS05), was selected for admission in Ph. D. programme under the supervision of Dr. Pawan Kumar Saini (Assistant Professor, DLIS) through F.No.: LIS/1-2/RD/CUHP/2020/45, dated- 27-07-2020. I am conducting my research work under the supervision of Dr. Pawan Kumar Saini. Presently my supervisor is not working in this university but he is supervising my research work. I also want to complete my research work under his supervision. As per the clause 7.6 of the updated Ordinance No.- 42, permission for the same should be granted.

Thus, I request you to kindly recommend and forward my consent application through the proper channel so that I can continue my research work smoothly. I shall remain grateful to you for this.

Your sincerely

Vishal

Vishal
Research Scholar
(CUHP20RDLIS05)

Subject | Gourav,
Mail to Dr. Pawan for his consent to supervise.

This is issued as per directions of the HoD, Library and Information Sciences.

Regards,
Dimple Patel
Associate Professor and Head
Department of Library and Information Science
Central University of Himachal Pradesh.

"...it may be necessary to encounter the defeats, so you can know who you are, what you can rise from, how you can still come out of it." ~Maya Angelou

---

[Quoted text hidden]

Dimple Patel <dimple@hpcu.ac.in> Wed, Sep 21, 2022 at 9:10 A
To: Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in>

Gourav,
Resend the mail to Dr. Pawan at following IDs:
Pawan Saini <jjnpawan2008@gmail.com>, Pawan K Saini <pawan@ignou.ac.in>, "Pawan K. Saini" <pawankumarsaini@hpcu.ac.in>

Regards,
Dimple Patel
Associate Professor and Head
Department of Library and Information Science
Central University of Himachal Pradesh.

"...it may be necessary to encounter the defeats, so you can know who you are, what you can rise from, how you can still come out of it." ~Maya Angelou

---

On Tue, Sep 20, 2022 at 11:44 AM Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in> wrote:
[Quoted text hidden]

Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in> Wed, Sep 21, 2022 at 10:45
To: Pawan Saini <jjnpawan2008@gmail.com>, Pawan K Saini <pawan@ignou.ac.in>, "Pawan K. Saini" <pawankumarsaini@hpcu.ac.in>
Cc: surjeet Kumar <ssharmacuhp@hpcu.ac.in>, Dimple Patel <dimple@hpcu.ac.in>, "Head, DLIS CUHP" <hod_lisc@hpcu.ac.in>

धन्यवाद/Thanking you

सादर/regards,

550 5.1.1 https://support.google.com/mail/?p=NoSuchUser j13-20020a2eb70d000000b002652497a6 4d-or180516ljo.53 - gsmtp
Last-Attempt-Date: Mon, 19 Sep 2022 23:14:35 -0700 (PDT)

---------- Forwarded message ---------
From: Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in>
To: "pawankumarsaini@gmail.com" <pawankumarsaini@gmail.com>, ginpawan2008@gmail.com
Cc: surjeet Kumar <ssharmacuhp@hpcu.ac.in>, Dimple Patel <dimple@hpcu.ac.in>, "Head, DLIS CUHP" <hod_lisc@hpcu.ac.in>
Bcc:
Date: Tue, 20 Sep 2022 11:44:21 +0530
Subject: Regarding letter
----- Message truncated -----

Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in> Tue, Sep 20, 2022 at 11:46 AM
To: "pawankumarsaini@gmail.com" <pawankumarsaini@gmail.com>, jinpawan2008@gmai.com
Cc: surjeet Kumar <ssharmacuhp@hpcu.ac.in>, Dimple Patel <dimple@hpcu.ac.in>, "Head, DLIS CUHP" <hod_lisc@hpcu.ac.in>

धन्यवाद/Thanking you

सादर/regards,

गौरव चम्बयाल/GOURAV CHAMBYAL
डाटा एंट्री ऑपरेटर/Data Entry Operator
गणित, कंप्यूटर एवं सूचना विज्ञान स्कूल/School of Mathematics, Computers and Information Science
हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय/Central University of Himachal Pradesh
शाहपुर परिसर, शाहपुर/Shahpur Parisar, Shahpur
मोबाइल/Mobile: +91- 9418555980
ई-मेल/ E-mail: gourav.cuhimachal@hpcu.ac.in

[Quoted text hidden]

---

pawan kumar saini <pawankumarsaini@gmail.com>
To: Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in> Tue, Sep 20, 2022 at 6:54 PM
Cc: jinpawan2008@gmai.com, surjeet Kumar <ssharmacuhp@hpcu.ac.in>, Dimple Patel <dimple@hpcu.ac.in>, "Head, DLIS CUHP" <hod_lisc@hpcu.ac.in>

Hi Gourav,

I think you had sent this to wrong email. Please send it to the correct email address.

Regards
Pawan
[Quoted text hidden]

Dimple Patel <dimple@hpcu.ac.in>
To: pawan kumar saini <pawankumarsaini@gmail.com> Wed, Sep 21, 2022 at 9:09 AM
Cc: Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in>, jinpawan2008@gmai.com, surjeet Kumar <ssharmacuhp@hpcu.ac.in>, "Head, DLIS CUHP" <hod_lisc@hpcu.ac.in>

Dear Sir,

गौरव चम्बयाल/GOURAV CHAMBYAL
डाटा एंट्री ऑपरेटर/Data Entry Operator
गणित, कंप्यूटर एवं सूचना विज्ञान स्कूल/School of Mathematics, Computers and Information
हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय/Central University of Himachal Pradesh
शाहपुर परिसर, शाहपुर/Shahpur Parisar, Shahpur
मोबाइल/Mobile: +91- 9418555980
ई-मेल/ E-mail: gourav.cuhimachal@hpcu.ac.in

[Quoted text hidden]

---

2 attachments

Letter of Mr Vishal regarding allotment of supervisor.pdf
1028K

Letter of Mr Abhinandan regarding allotment of supervisor.pdf
975K

Pawan K Saini <pawan@ignou.ac.in>
To: Gourav Chambyal <gourav.cuhimachal@hpcu.ac.in>
Wed, Sep 21, 2022 at 11:27 AM

Dear Gourav

I hereby consent to continue supervising research work.

Thanks & Regards

Pawan

[Quoted text hidden]

CENTRAL UNIVERSITY OF HIMACHAL PRADESH
[Established under the Central Universities Act 2009]
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School of Mathematics, Computer Science & Information Sciences
Department of Library and Information Science

Research Progress Report

in respect of RDC (Research Degree Committee) meeting for the period of 9th November 2020 to 9th October 2022 for upgradation from JRF to SRF

Programme of study: Ph.D.

Name: Abhinandan Kumar

Roll No./ Registration No: CUHP20RDLIS01

Department: Department of Library and Information Science

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Date of Enrolment: 26 October 2020

1. **Academic Progress**
   - **1.1. Course work- Completed**
   - **1.2. Synopsis- Submitted**
2. Participation in Conferences/Workshops/Webinars:
   - 2.1. Participated in Virtual International Conference on Library and Information Science (VICLIS 2021) as author and presenter on the research topic- NEW NORMAL ACTIVITIES OF PREMIER CULTURAL AND INFORMATION RESOURCE CENTRES IN INDIA: A QUANTITATIVE ANALYSIS . The conference is hosted by the Sri Lanka Technological Campus in collaboration with DLIS, University of Kerala, India and others on 23rd August, 2021.
   - 2.2. Participated in one day national webinar on Reference Management Tools organized by Central Library, Assam Don Bosco University in collaboration with Library and Information Science Professional Association on 28th August, 2021.
   - 2.3. Participated in NationalWebinar on Role of Academic Libraries in Study and Teachng during Pandemic Situation organized by B.C Gupta Memorial Central Libra Gurucharan College in association with IQAC, Gurucharan College, Silchar on 18th September 2021.
   - 2.4. Participated in the International Online Conference on Recent Advances in Information Technology (READIT-2021) during November 24-25, 2021 held at IGCAR,

2.5. Kalpakkam in association with Madras Library Association, Kalpakkam Chapter. The theme of this conference is - Innovative Technologies for the Sustenance of Libraries.

2.6. Attended national webinar on Unequal Pay: Gender Discrimination at Workplace on 20 December, 2021 conducted by HPKV BUSINESS SCHOOL, CUHP and sponsored by National Commission for Women (NCW).

2.7. Attended the webinar- DELNET: Resources and Services on 07/04/2021 organised by DELNET-Developing Library Network.

2.8. Participated in Six Days Short Term Programme on 'Recent Advances in Library Management and Information Technology' organised by Faculty of Library and Information Science, SOSS, IGNOU, New Delhi held from 12-17 September, 2022

3. Research Papers published

3.1. The pilot study entitled Need of Facet Analysis of MOOCs: a Review and Feasibility Study is published in a peer-reviewed Scopus indexed journal `Library Philosophy and Practice (e-journal)' ISSN- 1522-0222

3.2. The study entitled Use of K-Means Clustering Method for Books Data in Acharya Raghuveer Library, Central University of Himachal Pradesh, Dharamshala, India has been published by a peer-reviewed Scopus indexed journal `Library Philosophy and Practice (e-journal)' ISSN- 1522-0222

4. Research Papers submitted for publication:

4.1. A manuscript titled 'The Domain of MOOCs in India: an Ontological Depiction' has been submitted to The Journal of Web Semantics for publication on 26th September 2022.

4.2. A manuscript titled 'HEALTH INFORMATION TRANSFER IN RURAL INDIA: A STUDY FROM KANGRA VALLEY OF WESTERN HIMALAYAS' has been co-authored by me and submitted to The Serials Librarian Editorial Office for publication on 29 October 2022.

5. Participated in Academic/ Examination-related/ Co-academic/ Administrative task:

5.1. Perform all assigned task like teaching assistance, exam invigilation duty and others

Declaration:

I hereby declare that the information furnished above is true to the best of my knowledge.

Abhinandan Kumar

Signature of Student

हिमाचल प्रदेश केंद्रीय विश्वविद्यालय
Central University of Himachal Pradesh

[Established under the Central Universities Act 2009]

Synopsis
Approved by RDC
on 29-12-2022

विद्या वाचस्पति
उपाधि की आंशिक पूर्ति में
हिमाचल प्रदेश केंद्रीय विश्वविद्यालय
को जमा किया गया शोध-सारांश

RESEARCH PRODUCTIVITY OF SELECT INDIAN INSTITUTES OF TECHNOLOGY (IITs) AND NATIONAL INSTITUTES OF TECHNOLOGY (NITs) OF INDIA: A SCIENTOMETRIC STUDY

A synopsis

Submitted to the Central University of Himachal Pradesh

in Partial Fulfilment of the Degree of

DOCTOR OF PHILOSOPHY

स्कूल / In the School of Mathematics, Computer & Information Science

विभाग / In the Department of Library and Information Science

पर्यवेक्षक / Under the Supervision of Dr. Shivarama Rao K.

by

Vimlesh Patel

पंजीकरण / Registration No.: CUHP17RDLIS01

माह एवं वर्ष / Month & Year : December, 2022

हिमाचल प्रदेश केंद्रीय विश्वविद्यालय

धर्मशाला, हिमाचलप्रदेश भारत

CENTRAL UNIVERSITY OF HIMACHAL PRADESH

DHARAMSHALA, HIMACHAL PRADESH, INDIA

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INTRODUCTION

In view of the hyper competition among higher educational institutions, most of them are concerned of their research productivity and quality of education. Productivity and quality of publications of an institution not only depict the ongoing research activities but also play a crucial role in differentiation of the institution from other similar institutions in its standing and ranking. The institutes of national reputation are having full functional autonomy to enhance efficiency, quality and accountability and improved research facilities. The government of India confers the status of being an "Institute of National Importance" on some of the best public higher education institutions in the country. These are the institutions that serve as pivotal players in developing highly skilled personnel in the state and country.

The research productivity of the select Indian Institutes of Technologies and National Institutes of Technologies of India will be studied for the institution's publications output for the period 2010-2018, covered in the Web of Science and Scopus databases. The research literatures have a great importance for a scientist, faculty, scholars, students and library professionals as they keep new updated with new advances in their respective fields. Research output is an indicator of scientific development and knowledge growth of a country. Analyzing bibliographic pointers of the research publications by using scientometric parameters helps in interpreting data and reflects several aspects related to research productivity of an institution such as growth of literature, authorship pattern of publications, collaborative patterns of researchers, productive authors, collaborations with national and international organizations, preferred sources for publications by researchers by particular institutions, and comparative contrasts of institutions. This study mainly focuses on analyzing the research productivity of select IITs & NITs of India.

INSTITUTES OF NATIONAL IMPORTANCE IN INDIA

The Indian Institutes of Technology (IITs) and National Institutes of Technology(NITs) are the autonomous institutions under Ministry of Education, Government of India and known for advanced research and quality education in India. There are 23 IITs (Government of India, Ministry of Education, 2019) and 31 NITs (Government of India, Ministry of Education, 2019) in India that were established during different periods of time. Dr. Humayun Kabir had a great role in establishing Indian Institutes of Technology in India. Sir Ardeshir Dalal idea encouraged him for establishing IITs system in India and setup Sarkar Committee who recommended to establish Higher Technical Institutes in-line with Massachusetts Institute of Technology(MIT), U.S. Post-Independence Jawaharlal Nehru who

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was pioneer in establishing Indian Institutes of Technology, he envisioned that IIT system provide scientists and technologists of the highest calibre who would engage in research, design and development to help building the nation towards self-reliance in nations technological needs. In 1951 first IIT was established at Kharagpur, followed by Indian Institute of Technology Bombay in 1958, Indian Institute of Technology Madras in 1959 and Indian Institute of Technology Delhi in 1962. Foreign collaborations were made for establishment of these IITs. The Institute of technology Act was passed in the Indian parliament in 1961 and these institutions were awarded status of institutions of national importance. IIT Guwahati was established in 2001 followed by IIT Roorkee in 2001 and during 2008-2012 nine more IITs were established at Varanasi, Mandi, Indore, Ropar, Patna, Jodhpur, Hyderabad, Gandhinagar, Bhubaneswar. Recently, seven new IITs were established at Bhilai, Dharwad, Tirupati, Palakkad, , Dhanbad, Goa, Jammu during 2015–16. As on date there are 31 NITs in India, include the 14 old NITs (known as RECs earlier) established before 1965 at Tiruchirappalli, Surat, Allahabad, Durgapur, Kozhikode, Surathkal ,Kurukshetra, Jaipur, Rourkela, Jamshedpur, , Nagpur, Srinagar, Bhopal and Warangal, six institutions made NITs at later dates, 10 new NITs established in 2010 and the recent one in Andhra Pradesh. In 2002 RECs upgrade to National Institutes of Technology (NITs) as decided by MHRD (Now MoE). NITs are autonomous in nature and are governed by the National Institutes of Technology, Act, 2007 of Indian Parliament, which also declares them as Institutes of National Importance. They are among the top ranked engineering colleges in the country. NITs, therefore, play an important role in Science, engineering, technology and other disciplines education in India. During the last decade, many NITs have focused on promoting research activities. It is in this context, that the present study will analyses research performance of select IITs and NITs during the period 2009–2018, in terms of quantity as well as quality of research output.

ABOUT THE SELECT IITs AND NITs OF INDIA

For this study 04 NITs and 04 IITs are considered. Indian Institute of Technology Jodhpur (About IITJ , 2019) were established in 2008, IIT Ropar in 2008 (Annual Report 2017-18 of IIT Ropar, 2019), IIT Mandi in 2009 (About the IIT Mandi, 2019) and IIT Patna in 2008 (About Us of IIT Patna, 2019). Amongst the NITs the NIT Hamirpur was established as REC in 1986 and it was given the status of Deemed University in 2002 and renamed as NIT Hamirpur (About the NIT Hamirpur in Annual Report 2015-16 pp04, 2019), , NIT Jalandhar was established as REC Jalandhar in 1987 renamed into NIT Jalandhar 2002 (About NITJ, 2019), , NIT Patna established in 1886 as a pleaders survey training school and government promoted as Bihar College of Engineering Patna in 1924 and in 2004 renamed as NIT Patna (About the NIT Patna, 2019), Malaviya National Institute of Technology Jaipur was established as Malaviya Regional Engineering College, Jaipur in 1963, in 2002 it was renamed as National Institute of Technology Jaipur (About MNIT Jaipur , 2019) and in 2007 NITs awarded the status of Institutes of National Importance through Act of Parliament.

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Table: 1 ESTABLISHMENT OF SELECT IITs OF INDIA

S.No.	Name of Institute	Establishment in the year
1	Indian Institute of Technology Jodhpur	2008
2	Indian Institute of Technology Ropar	2009
3	Indian Institute of Technology Patna	2008
4	Indian Institute of Technology Mandi	2009

Table :2 ESTABLISHMENT OF SELECT NITs OF INDIA

S.No.	Old Name of Institute and year of establishment	Upgraded with NIT and in the year
1	REC, Hamirpur, 1986	National Institute of Technology Hamirpur on 2002
2	REC, Jalandhar 1987	Dr B R Ambedkar National Institute of Technology Jalandhar on 2002
3	Malaviya Regional Engineering College, Jaipur, 1963	Malaviya National Institute of Technology Jaipur on 2002
4	Training School 1886, promoted as Bihar College of Engineering Patna, 1924	National Institute of Technology Patna on 2004

RESEARCH AREAS IN SELECT IITs & NITs OF INDIA

Select IITs and NITs of India are undertaking research activities in various disciplines. Some of the area of research are as given below:

IIT Mandi - geothermal and bio-mass, polyoxometalate based cluster materials for solar cell, nanostructured materials for biomedical and sensing applications , high energy materials, smart material, materials for high density magnetic storage devices, , Green Energy technologies such as solar, hydro, wind, etc. (Research and Development at IIT Mandi, 2019)

IIT Patna - Ni:ZnO-based Schottky pattern for NO2 detection; Alpha Lead Oxide; Freestanding Borophene and Its Hybrids;Optimal Binary Periodic Almost-Complementary Pairs;DNA-Carbon Dot Hybrid Hydrogel for Sustained Release of Cancer Drug (Research in IIT Patna , 2019).

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IIT Ropar - Mathematical Modeling of two-channel exclusion processes relevant to real world; Surface Engineering of cutting tools for sustainable; Calculation of Nuclear Transition Matrix Elements; Neuroimaging; Quantum dynamics of energy transfer processes; Crowd sourced annotations; Sustainable Oxygen Depolarized Cathode Material of HCL Electrolysis etc. (Research at IIT Ropar , 2019).

IIT Jodhpur - Complex real world applications multifunctional applications; Fundamentals interactions of natures; Chemical neuroscience; low cost Microbial Carbon capture (MCC) cells for algae cultivation and powers generation; Potential Therapeutic Leads Targeting Molecular Hot Spots of Duchenne Muscular Dystrophy for Clinical Trial; Molecular studies; Centriole Protein, CPAP in neuro developmental disorder; Integrative Approach for Identification of Disease Genes; Deposition of Particulate Matter in Lungs; public outreach grant; Information Access from Document Images of Indian Language;
(Research & Development , Ongoing Projects at IITJ, 2019).

NIT Hamirpur - geo-technical soil investigation, GIS, Transformers and machines diagnostics, materials and industrial tribiology; mobile computing; wireless sensor networks; re-engineering, polymer technology etc (Research and Development at NIT Hamirpur , 2019).,

NIT Jalandhar - treatment technology of ground water of AB sugar limited,_Technology Business Incubator, Testing of cement, sand, steel, aggregate & water; Testing of steel, materials (Consultancy at NIT Jalandhar, 2019).

NIT Patna - synthesis characterization crystal structure; modelling and nonliners dynamics, mathematical study of noise; non-ideal quantum measurement (Research at NIT Patna, Annual_Report_2016-17, pp 87-89, 2019).

MNIT Jaipur - Encapsulate Nanostructured Metal Oxides ;Advanced Control Techniques for Multifunctional Inverter; MEMS based piezoelectric energy harvester; metal-fullerene nanocomposite (Research at MNIT Jaipur , 2019).

Table: 3 YEAR WISE DETAIL OF NIRF, MINISTRY OF EDUCATION, GOI, RANKING FOR SELECT IITs OF INDIA

S.No.	Name of Institute	Rank in 2016	Rank in 2017	Rank in 2018	Rank in 2019
1	Indian Institute of Technology Ropar	9th	21th	22nd	29th
2	Indian Institute of Technology Patna	10th	19th	24th	22nd
3	Indian Institute of Technology Mandi	20th	28th	26A	20th
4.	Indian Institute of Technology Jodhpur	25th	65th	54th	50th

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Table:4 YEAR WISE DETAIL OF NIRF, MINISTRY OF EDUCATION, GOI, RANKING FOR SELECT NITs OF INDIA

S.No.	Name of Institute	Rank in 2016	Rank in 2017	Rank in 2018	Rank in 2019
1	National Institute of Technology Hamirpur	51th	59th	64th	60th
2	Dr B R Ambedkar National Institute of Technology Jalandhar	42nd	-	74th	-
3	National Institute of Technology Patna	87th	-	-	-
4	Malaviya National Institute of Technology Jaipur	37th	70th	52nd	53rd

SIGNIFICANCE OF THE STUDY

IITs & NITs are institutions of national importance for Education & Research in Science, engineering, Technology and other discipline in India which contributes to nation's socio-economic development by producing high quality research outputs in various fields. Growth in each field is measured by applying statistical parameters methods, this study will be helpful for forecasting trend of research in each field and major thrust areas of institutions for research. IIT's and NIT's are well poised to meet the challenges ahead that transforms engineering and technology sector into the engine of growth of Indian economy by providing the human resources, and skills and technology for the sustainable development, Statistical measurement of research productivity of institutions is helps in knowing the overall growth of the institution in year-wise, subject-wise, strength and weakness of research in particular field, co-authorship pattern in an effective way and identification of high impact journals which are considered more frequently for publication. This study will provides the insight and understanding regarding the preferred means of scholarly communication in form of research publications. This study will be useful to subject specialists, librarians and information managers in collection development, faculty, students, researchers, analysts, policy makers and institute administrators to look into the trends and for the government agencies to make effective policies and funding provisions.

STATEMENT OF PROBLEM

The topic of the study is *Research Productivity of Select Indian Institutes Of Technology (IITs) And National Institutes of Technology (NITs) of India: A Scientometric Study*. The

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researcher observed that several studies have been carried out on analysis research publications in bibliographic database like Web of Science and Scopus, But there are very few studies that make comparative analysis of publication data from Web of Science and Scopus, and other citation databases platforms, it is also pertinent to mention that not all citation databases are compressive in nature. There is a lack of systematic, authoritative, and updated information regarding these aspects which can further facilitate comparative studies. Comparative Assessment of research output has a significant role determining inputs in policy making of research establishment and funding agencies. It also helps in identifying new avenue in research and development, Library and information scientists always had a role in assessing the research literature quantitatively and qualitatively. Scientometrics analysis of scholarly communications are very much required in Library and Information Science domain and help in to understand user needs, collection development in identifying the knowledge gaps and developing value added information products and service. The present study will also help academicians, policy makers and library information professionals in decision making process.

REVIEW OF LITERATURE

The review the literature has been conducted for deeper understanding of research problem, for reviewing of literature the search was conducted with combination of various key terms such as 'Mapping of research productivity', 'Research productivity', 'Research output" and 'Mapping of research output' Scientometrics study, Scientometrics study of university; Scientometrics study of Institution; Bibliometrics study; Comparison of Web of Science and Scopus etc. in National Digital Library of India, IndCat, Emerald database, Shodgangotri, Shodganga, e-journals; Taylor and Francis journals, IEEE, Science Direct, Springer link, Google scholar and other databases, search also made in search engines and websites that concerning with research study.

The study analyzed citations of University of Navarra Spain in the area of health sciences, the result of study indicated that 14.7% more citation in Scopus compare to Web of Science (Torres-Salinas, Lopez-Cózar, & Jiménez-Contreras, 2009). Another study analyzed the quantitative research performance of in terms of terms of total documents, citable documents, and non-citable documents of OPEC member countries (Maurya, Shukla, & Ngurtinkhuma, 2018). There is a study conducted to analyze Russian publications covered in Science Citation Index, Scopus, and Chemical Abstracts Databases from 2005 to 2009. The result shown that While a gradual decrease in the number of peer-reviewed Russian_language journals constitutes a general trend for all three databases, the Chemical Abstracts database leads in terms of the coverage of these journals (Zibarevaa & Soloshenkoc, 2011). Another research analyzed the publications of Iraqi-Kurdistan universities from 1970 to 2012 in terms of Scopus database publication started in 1972 but since 2004 the result shown that publication are steadily increasing in this study. The co-authorship pattern shown that 52% of Iraqi-Kurdistan Publications were co-authored with foreign countries (Noruzi & Mohammadhiwa, 2014).

In one of the study revaluated that USA and Switzerland are in top for international cooperation by faculty members. The three institutions i.e Islamic Azad University, Tehran

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University and Amir Kabir University of Technology having highest rate of co-authorship (Galyani-Moghaddam, Jafari, & Sattarzadeh, 2017).

The another study focused for analyzing the research in Slovenia between 1996 and 2011 of authors who were actively engaged in research. The study uses the Slovenian COBISS bibliographic system and SICRIS research system for document linking to SCOPUS and WOS using complex algorithms (Bartol, Budimir, Dekleva-Smrekar, Pusnik, & Juznic, 2014). The data of four Spanish universities by comparing results of Scientific work amongst with social science researchers. The finding of the study shows that the some social sciences researchers are internationalised. The individuals are prestigious in local academic scientific community (Etxebarria & Gomez-Uranga, 2010).

The study analyzed the documents of Russian institutions covered in web of science and Scopus databases and special focus one time period of the year 2013. The parameters uses are document type, country and sources, publication language, research discipline. The study reveals that Russian publication counts strongly depend upon the database used, and upon changes in database coverage (Moed, Markusova, & Akoev, 2018).

The study focus on eight universities of Punjab in science that appeared in the Scopus/Scifinder during the period 1991-2014 the study suggested that similar studies of research productivity of universities in other states may be carried out (Sangeeta & Kaur, 2016).

The study analyzed of publications output of the Islamic University of Indonesia. Data for this study was obtained from Scopus database and analysed using various bibliometric indicators (Jahan & Naushad Ali, 2009).

The study analyze the performance of Universiry College of Medical Sciences, the study analyze of a total of 2557 research papers of the period from 1975 to Nov. 2013 and the data collected from Scopus database, the result shows that collaborative pattern of three authors is 25.6% highest and USA is top collaborative country : (Meera & Sahu, 2014).

The research study focus on Tamil Nadu Universities for the period of 12 years reveals that pace of gradual growth trend in the study period and trends of decreasing found in the year 2011 (Shivaraman & Nagarajan, 2004).

The result of year-wise (27 years from 1989 to June 2015) distribution by different sources of research output on Bharathidasan University publications when examined reveals a maximum contribution in the years of 2014 and 2011 (Kumari & Surulinathi, 2016).

Another study covered the Research output of Library & Information Science covers fifteen (15) universities belonging to seven (7) states, he suggested that There is a need for study on the basis of primary data including Curriculum Vitae (CV) and annual reports (Sharma & Chakravarty, 2016).

The study made comparison of data of faculty of nursing from Web of Science and Scopus databases for 2014 faculty publications, the study concluded that academic nursing programs may be better represented by Scopus (Powell & Peterson, 2017). The study examined the

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publications on wide tourism by comparing publications data from Scopus databases and Web of Science databases and the correlation between overlap, coverage, dispersion, increases, and concentration of documents was conducted. The study concluded that the both databases i.e. WoS and Scopus databases differ in scope (Sánchez, 2016).

ABOUT WEB OF SCIENCE DATABASE

Web of science is world most trusted bibliographic and citation database presently produced by Clarivate Analytics (US) it provide multidisciplinary platform connect for citation data discovery, access and assessment. Web of Science Core Collection is comprehensive platform provide access to citation data of across disciplines. The Web of Science Core Collection provide discovery and access of following citation index representing citation connections of research in globally significant journals, Proceedings, books in sciences, social sciences and art & humanities:

1. Science Citation Index
2. Social Sciences Citation Index
3. Arts & Humanities Citation Index
4. Conference Proceedings Citation Index
5. Book Citation Index
6. Emerging Sources Citation Index
7. Index Chemicus
8. Current Chemical Reactions

ABOUT SCOPUS DATABASE

Scopus is produced by Elsevier (Amsterdam, Netherlands) the largest abstract and citation database of world peer-reviewed literature and provide overview of comprehensive world research output research in globally significant journals, Proceedings, books in science, technology, medicine, social sciences, and arts and humanities.

OBJECTIVES OF STUDY

The major aim of the study is to determine Research and publications output of the selected of IITs and NITs of India. The study specially will focus on research profile, growth of publication over time, Profile authors, scholarly impact, thrust research areas, scholarly communications patterns, partnering institutions and international collaborations.

The following specific objective has been set for the present study

1. To determine year-wise publications of select IITs and NITs from the Web of Science and Scopus database.
2. To ascertain the authorship pattern of research publications of select IITs and NITs in the Web of Science and Scopus databases
3. To identify and find out the sources of information where the research is published such as journals, conference proceedings etc from Web of Science and Scopus database.

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4. To find out the type of publications in which the researcher has published their findings from WoS and Scopus database.
5. To know the extent of publications available in open access form in the Web of Science and Scopus database for select IITs and NITs.
6. To determine most prolific authors throughout the period of study in the Web of Science and Scopus database from select IITs and NITs
7. To ascertain the research publications collaboratively published with authors of other countries of select IITs and NITs in Web of Science and Scopus database.
8. To find out top collaborating institutions with select NITs and IITs from the Web of Science and Scopus databases.
9. To ascertain Subject/Research area-wise distribution of publications in the Web of Science and Scopus databases of select IITs and NITs.
10. To find out the highly cited publications of select IITs and NITs in the Web of Science and Scopus databases.

SCOPE OF THE STUDY

The data will be collected for the period of nine year (2010-18) and In view of properly define the scope of the study; the study will be limited to the following select institutions:

Serial No.	Name of Institute	Record in Web of Science on 06 Nov 2020 (Web of Science Core Collection)	Record in Scopus on 06 Nov 2020 (Scopus, 2020)
	Rajasthan		
1	Indian Institute of Technology Jodhpur	528	957
2	National Institute of Technology Jaipur	1278	3006
	Punjab		
1	Indian Institute of Technology Ropar	1118	1604
2	Dr B R Ambedkar National Institute of Technology Jalandhar	1075	1942
	Himachal Pradesh		
1	Indian Institute of Technology, Mandi	946	1513
2	National Institute of Technology Hamirpur	961	1929
	Bihar		
1	Indian Institute of Technology Patna	1081	2001
2	National Institute of Technology Patna	283	797
	Sum of Record	**7270**	**13749**
	Total of both database	**21019**	

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HYPOTHESES OF THE STUDY

Keeping in view of the scope and objectives of the study the following hypothesis are formulated :-

1. There is significant level of variation in research productivity in amongst of select IITs & NITs in WoS and Scopus database.
2. There is constant growth/increasing trend in research productivity of select IITs and NITs in WoS and Scopus database.
3. Researcher communicate most of their research finding through research article of select IITs and NITs in WoS and Scopus database.
4. There is significant level of variation in contribution of co-authored publications and single authored publications of select IITs and NITs in WoS and Scopus database.

RESEARCH DESIGN AND METHODOLOGY

This study will use Web of Science and Scopus database for drawing publications data of IITs and NITs. Both Web of Science and Scopus are the largest international multidisciplinary indexing, abstracting and citation databases. The study will analyse nine year publications data from the period 2010-2018. The nine years period is a good representative sample to study research productivity of any institution.

The search will be conducted in Web of Science core collection for publications data using following search strategy: Organization-Enhanced: Indian Institute of Technology (IIT) - Mandi Timespan: 2010-2018. Indexes: SCI - Expanded, SSCI, A&HCI, CPCI - S, CPCI - SSH, ESCI, CCR - Expanded, IC,. Some institutions were known in old names and were renamed with new name so that search has been made on old name and new names as well . i.e. NIT Hamirpur earlier know as Regional Engineering College (REC) Hamirpur so that search has been made with combination in old and new name as well i.e. Organization-Enhanced: (Regional Engineering college Hamirpur OR National Institute of Technology Hamirpur) Timespan: 2010-2018. Indexes: SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI, CCR-EXPANDED, IC.

The following search strategy will be used for publication data from Scopus i.e. (AFFIL (Indian Institute of Technology Ropar) AND PUBYEAR > 2009 AND PUBYEAR < 2019). The same search strategy will be used for collection of publication data for all others institutions covered in this study. The full records will be downloaded and converted in the excel format and categorised into articles, proceedings papers, editorial material, titles, author records, affiliation of authors etc.

The present scientometric study will be conducted on various parameters i.e. detailed picture of year wise publication, the authorship pattern in publications; specific titles of publications of researcher of select institutions in various sources such as journals and conference proceedings etc. Extent of publications in open access form in journals indexed; highly

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prolific authors of select institutions; type of publications in which the researcher has published their findings; to ascertain the research publications collaboratively published with authors of other countries; top collaborating institutions with NITs and IITs of select institutions; to give coverage of subjects wise distribution of publications of select institutions, top productive author will be find out and performance will be analyze according to objectives; the top productive countries and collaborative institution will be identified by using the affiliations text.

The collected data will be classified by using excel software and the same will be loaded into SPSS (Statistical Package for Social Sciences) for the purpose of analysis. The data collected from the Web of Science and Scopus databases will be analysed to test the framed hypothesis.

LIMITATIONS OF THE STUDY

The following are the limitations to the study

1. This study is confined to the Web of Science and Scopus database
2. Publication data published from 2010 to 2018 (09 year period) were only taken up for the study.
3. In order to get deeper insight of covered institutions and keep the data in manageable this study is limited to 04 IITs and 04 NITs of India.

CHAPTERISATION

The thesis will be divided into five chapters. A brief description about these chapters is given below.

Chapter 1 – Introduction.

Chapter 2 - Review of Related Literature.

Chapter 3 – Methodology

Chapter 4- Analysis and interpretation of data

Chapter 5 – Findings, suggestions and Conclusions.

The thesis ends with a list of bibliographic references and appendices.

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REFERENCES

Research Article/Annual Reports/Websites/Thesis

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Abbreviations: "WoS (Web of Science);SCI-Expanded (Science Citation Index Expanded); SSCI (Social Sciences Citation Index); A&HCI (Arts & Humanities Citation Index); CPCI-S (Conference Proceedings Citation Index – Science); CPCI-SSH (Conference Proceedings Citation Index - Social Sciences & Humanities); ESCI (Emerging Sources Citation Index); CCR-Expanded (Current Chemical Reactions); IC (Index Chemicus). NIRF (National Institutional Ranking Framework);

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को जमा किया गया शोध-सारांश

Knowledge Organization in Massive Open Online Courses (MOOCs) Domain: an Ontological and Faceted approach

A synopsis

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1 Introduction

Knowledge Organization (KO) is concerned with schemes and processes that provide a system of representation and order for knowledge and information objects. Authority File, Taxonomy, Thesaurus and Ontology are some popular Knowledge Organization System (KOS). Classification, Indexing, Subject Analysis and Tagging are examples of Knowledge Organization Process (KOP). A KOS is a prerequisite for KOP [1]. A Knowledge Organization System presents a set of concepts and the relationships among them in a given subject field.

Massive Open Online Courses (MOOCs) are one of the emerging subject fields in the current education system. MOOCs incorporate all academic fields, online virtual spaces and a wide range of stakeholders [2]. As a result, a large set of entities, classes, concepts, relations may be visualised in the domain of MOOCs. Knowledge representation, discovery and sharing in this domain require an explicit visualization and formalization of this spectrum of existence. Hence, there is a strong need to formulate the tools of KO in MOOCs domain . Ontological exploration of the domain of MOOCs is the primary objective in this regard.

Ontology is an organised knowledge of a specific field that has been developed through defining concepts and relations between them in that field [3]. Ontology organises concepts and their relationships hierarchically to gain new knowledge. Ontology provides explicit information and knowledge [4]. Its main applications in information systems include extracting and collecting knowledge, sharing and reusing formal knowledge between systems, managing terminology and creating terms for knowledge representation. Ontologies are also used in saving, analysing, and retrieving data, demonstrating relationship between concepts, discovering knowledge, and reusing knowledge for decision support [5]. Likewise, Facet-analytic approach provide a structure for KOS that is based on logical principles [6]. Thus, it is obvious that formulation of ontologies in the domain of MOOCs and further intended processing of obtained data set may complete the KO concerns in the domain of MOOCs.

2 Review of Literature

The objective of KO within LIS community is to develop better information services [7]. To fulfil the informational need of learners, many research studies have been conducted to develop a course recommender system for learners. Uddin et al. [8] performed a compendious study into the research conducted in the area of MOOCs Recommendation Systems. In their study, 116 research articles of this area are analysed which have been published from the year 2013 to 2021. The study concluded that the most significant impediment to MOOCs success is the high dropout rate, which is driven by erroneous selections from the vast array of options offered on MOOCs platforms. The study further suggests that "the issue can be resolved by recommending the right options to the learner. Unfortunately, a comprehensive insight of the MOOCs Recommender System (MOOCRS) is not available to help the researchers, students, and practitioners." One of the main gaps identified in this study was the unavailability of publicly available MOOCs dataset for further processing as per the adopted method and approach. Likewise, Alzahrani1 and Meccawy [9] specifies that "MOOCs rapid increase hinders learners while searching and choosing proper courses, leaving people to get overloaded with too many choices over the Web and therefore get lost in hyperspace." Researchers are unable to gain access to essential MOOC data that would allow them to generate user preferences, make recommendations and do practical customization for learners. Furthermore, individual MOOCs platform efforts are insufficient to overcome information overload and the "lost in hyperspace" issue.

The aforesaid review indicates that only the issues related to learner's information needs have been addressed. While, there are many more concerned groups like MOOCs developers, researchers, academicians, reviewers, IT personnels and policy makers. All of these group members have their own information needs in the field of MOOCs. Getting the data set needed for further processing is also seen as a major problem. To address all these information needs issues Ramaprasad and Papagari [10] emphasised the need of ontology - "The ontology can be used to map the state-of-the-need, the state-of-the-practice, and the state-of-the potential regarding the problem." They further explain that- "ontological design is a method of logical

analysis, synthesis of research and practical knowledge, its interpretation, and application to the design of solutions to complex, ill-structured, and plastic problems." So, with the outcome of ontological analysis and exploration further desired acquisition and processing of data set can be easily undertaken.

3 Statement of Problem

Map out multi compatible Knowledge Organization System (KOS) and approach in the domain of MOOCs.

4 Research Questions

- How to conceptualise the entities involved in the domain of MOOCs for formulating KOS?
- How to organise the concepts of the undertaken domain in a formal logical context?

5 Research Objectives

1. To explore and conceptualise the entities, their semantic categories and relationships that exist in the domain of MOOCs.
2. To formalise the MOOCs domain knowledge.
3. To extract the requisite semantic data sets from the domain of MOOCs.
4. To enumerate and define the categorized facets of MOOCs.
5. To empower domain knowledge-based operations and services in the domain of MOOCs in India.

6 Scope of Study

The coverage of this study includes four MOOCs platforms- SWAYAM, mooKIT, NPTEL and IITBombayX. The standard terms and definitions have been taken from the documents officially released by Ministry of Education, Govt. of India and University Grants Commission (UGC), New Delhi, India.

7 Importance of Study

The study paves the way of KO in the domain of MOOCs. Domain knowledge can be easily represented, shared, discovered, visualised, used, reused and integrated as per users need.

8 Methodology

The ontological and faceted approach will be used to analyse and synthesize the components involved in the domain of MOOCs. The steps are as follows:

Step-1 The purpose of ontologies as well as their scope will be described.

Step-2 Concepts, terms, and language needed for ontology formulation will be recognized.

Step-3 Ontology will be conceptualised and described.

Step-4 Domain notions will be formalised by creating a hierarchy and identifying communications like 'Part-of' and 'IS-a'.

Step-5 Consistency of ontology will be checked by running the reasoner involved in the Ontology Editor Software- Protégé. Different queries will have also been executed to check the authenticity of search results.

Step-6 Required data sets will be harvested from formulated ontologies for further facet analysis.

Step-7 Principles involved in the selection of facets will be differentiation, relevance, ascertainability, permanence, homogeneity, mutual exclusivity and fundamental categories.

9 Tentative Chapterization

Chapter 1: Introduction This chapter will set the context and purpose of the study as well as define the problem under investigation. The objectives, scope, and importance of study will be thoroughly explained.

Chapter 2: Review of Literature This chapter will evaluate relevant prior research and literature for the current investigation. The literature will be described, summarised, evaluated and clarified in the review. It will provide a theoretical foundation and context for the current study in relation to the available literature.

Chapter 3: Methodology A methodological system suitable for this study will be described in this chapter. This chapter will specify steps, approach, data collection tools and techniques that will be adopted to accomplish the research objective.

Chapter 4: Massive Open Online Courses (MOOCs) Ontologies In this chapter, intended ontologies of MOOCs domain are formulated and illustrated as per the methodological steps.

Chapter 5: Massive Open Online Courses (MOOCs) Facets Definition, hierarchy and scope note of formulated facets will be illustrated in this chapter.

Chapter 6: Conclusions and Recommendations Formulated model and approach of KOS for KO in the domain of MOOCs will be demonstrated in this chapter. Prospective use and applicability of this outcome is enumerated.

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Appendices

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HEALTH INFORMATION RESOURCES AND INFORMATION SEEKING BEHAVIOR OF RURAL COMMUNITIES: A STUDY OF KANGRA VALLEY OF WESTERN HIMALAYAS

A Synopsis submitted to the Central University of Himachal Pradesh
in partial fulfillment of the requirements for the
award of the degree of

DOCTOR OF PHILOSOPHY IN
LIBRARY AND INFORMATION SCIENCES

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1. INTRODUCTION

One of India's most important economic and employment growth drivers is healthcare. Health care is a system that includes people, organizations, and resources working together to increase and sustain health. The World Health Organization (WHO, 1948) defines “health as a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity” (Sartorius, 2006).

In India, Ministry of Health and Family Welfare (MOHFW) is responsible for the health delivery system at national level and sets overall policy and framework for the health sector (Mishra, 2022). When compared to other nations, when evaluated as a whole, India's spending on public health care is inadequate. India's state and central governments have allocated 1.8% of GDP to public health in 2020–2021. (National Health Profile, 2020), and they planned to improve it to 2.5% by 2025. (National Health Policy, 2017).

The COVID-19 epidemic and its repercussions in the previous two years have highlighted the value of an effective public health system. Public health in India is mostly administered by the individual states. The MOHFW has been allocated Rs 86,201 crore in 2022-23 and “The PM-Ayushman Bharat Health Infrastructure Mission (PM- ABHIM) was launched in the budget for FY21-22 to enhance the health system throughout all three tiers of rural healthcare system” (primary, secondary, and tertiary) (Mishra, 2022). The 15th Finance Commission has therefore proposed allocating one lakh crore rupees to the health sector from 2021–2026 (MOHFW, Union Budget 2022-23).

“Currently at 1.25 billion population, India is expected to reach 1.6 billion by the year 2050” (EH News Bureau, 2019) and majority of the Indian population living in the rural areas. The Indian healthcare scenario presents a spectrum of contrasting landscapes and it has come under increased pressure from a number of factors, including a growing population, illiteracy, fewer resources and services offered, and insufficient infrastructure, especially in rural areas. Rural people continue paying high amount from their own pocket for accessing public healthcare. There are primarily two types of service providers in rural areas: state and government agencies, and rest are traditional healers. Hence, a "Healthy Nation" can only be attained through the provision of quality assured preventive, promotive, and curative services to rural and remote areas, and libraries can also play an important role in bridging the information gaps and ensuring that people in these communities have access to accurate health information.

2. RURAL HEALTH CARE SYSTEM IN INDIA

The term "health care system" refers to the coordinated network of people, institutions, and resources put in place to improve and maintain the health of a population. These all entities work together to ensure that the human population has access to high quality healthcare. In India healthcare organization works at three levels i.e., Primary, Secondary and Tertiary level (see table 1&2) based on the population norms and average rural population covered. Primary healthcare in rural areas is often provided via a three-tiered system consisting of a sub centre (SC), primary health centre (PHC), and community health centre (CHC). “In the Union Budget 2017-18, it was stated that 1.5 million SCs and PHCs would be upgraded to AB- Health and Wellness Centers (HWCs) by the end of 2022” (Rural Health Statistics, 2020).

The National Health Mission (NHM) allocates state funds to promote activities that increase community access to and satisfaction with primary and secondary health care. There are two missions included under NHM i.e., National Rural Health Mission (NRHM) and National Urban Health Mission (NUHM). Primary health care is a central focus of both the National Urban Health Mission (NUHM) and the National Rural Health Mission (NRHM), whose respective missions are to improve health care delivery in rural regions and to satisfy the health care requirements of the urban poor, respectively (Mishra, 2022). The Indian healthcare system is expanding at a rapid rate because to its expanding coverage, services, and increased investment by both public and private entities. Secondary and tertiary care facilities are concentrated in major cities, whereas primary healthcare centers (PHCs) serve rural regions where the government, or the public healthcare system, is responsible for the majority of the population. Even though the rural population norm was used to determine the number and distribution of SCs, PHCs, and CHCs, the “Standing Committee on Health (2021) found that these facilities fell short by 23% in SCs, 28% in PHCs, and 37% in CHCs, respectively”, of the coverage targets that were set for them (Rural Health Statistics, 2020). By the end of March 2020, 885 primary health care centers and 33,886 Sub centers lacked the infrastructure required to reach the targets set by the National Health Policy, 2017.

2.1.Primary Health Care Level

It is the initial point of interaction between the healthcare system and the general population. Rural residents have easy access to the Sub center and the Primary Health Center, both of which are within walking distance. It is a vital service that is accessible and accepted by the

community via their active participation at a minimal cost. Multipurpose workers, health advisors in rural areas, ASHA workers, and trained dais are all a part of this organization.

Table 1. Population covered under SC, PHC as per Population norms

Center	Population Norm		Average rural population covered
	Plain Area	Hilly/ Tribal Area	
Sub Center	5000	3000	5,729
Primary Health Center	30000	20000	35,730

Source: Rural Health Statistics 2020-2021

Sub Centre (SC)

The subcenter serves as the primary point of contact between the primary healthcare system and the community. It is responsible for providing the most fundamental level of curative treatment as well as all primary healthcare services to the people living in rural areas at the periphery level. A Sub centre is classified into two types; Type A, where delivery facility is not available and Type B, where delivery facility is available. "As of March 31, 2021, there were a total of 157819 Sub Centers (SCs) operating in both rural and urban areas, with 151610 SCs operating in rural areas and 1718 SCs operating in urban areas, and 1.5 lakh existing SCs will be converted into health and wellness centres" (Rural Health Statistics, 2020-2021).

Primary Health Centre (PHC)

PHC is the community's first point of contact with a medical officer. It is the backbone of health services and referral centre for six sub centre. Its primary objective is to provide comprehensive, curative and preventive medical treatment to rural populations, with a particular focus on the promotive and preventive facets of medical care. As of the March 2021, there were 30579 primary healthcare centers (PHCs) operating in India, 25140 were in rural regions, while 5435 were in urban areas. Additionally, one primary health care centre (PHC) will be affiliated with each medical college as part of the Re-Orientation Medical Education programme (ROME).

2.2. Secondary Health Care level

The community health centers (CHC) are included in this first referral tier. The primary goal of the CHC is to offer the people of the community with high-quality, compassionate health care that meets all their needs. Each CHC comprises four PHC. For CHCs to meet the IPHS standard of quality care for their communities, the National Rural Health Mission (NHRM) plans to bring their services up to IPHS (Indian Public Health Standards) level. As a bridge between the civil hospital and the primary health centre, the CHC was created to serve patients referred by the PHC.

Table 2. Population covered under CHC as per Population norms

Center	Population Norm		Average rural population covered
	Plain Area	Hilly/ Tribal Area	
Community Health Center	120000	800000	1,71,779

Source: Rural Health Statistics 2020-2021

3. PRIMARY HEALTH CARE IN HIMACHAL PRADESH

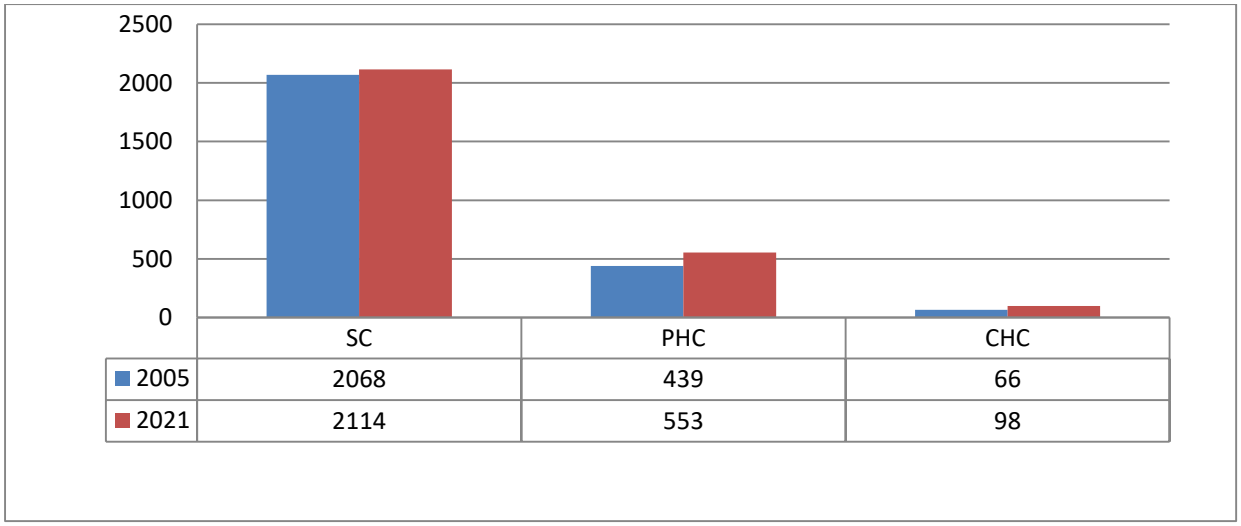
Public health is a state responsibility, and primary healthcare is managed by the states. The Bhore committee, which was established in 1946, brought attention to the notion of primary healthcare as a fundamental health unit. It is the initial point of interaction between the healthcare system and the general population. The Department of Health and Family Welfare is responsible of healthcare delivery at the state level and also in charge of carrying out health programmes and supervising medical education and training. It receives Rs 83,000 crore (96%) of the ministry's budget (Mishra, 2022). It was suggested that, in context of the country's inadequate primary healthcare healthcare system, the country's healthcare spending should focused on strengthening the grassroots primary healthcare system, with the hope that identifying and diagnosing early health issues would slash the need for complex specialist care at the tertiary level. To that purpose, the 15th Finance Commission suggested allocating two-thirds of all healthcare spending to primary care by 2022, along with a grant of Rs 70,051 crore given over the period of five years

(2021-2026) via local governments. The funds from these grants will be used to upgrade SCs and PHCs into HWCs, support for diagnostic infrastructure for primary health care activities and for urban HWC, SC, PHC at block level.

The population of the state of Himachal Pradesh in India is 6,864,662 and nearly 90% of the state's population in this hilly state resides in rural areas, thus any gaps in primary care delivery will have a substantial effect on the state's healthcare outcomes ("Himachal Pradesh - Wikipedia," 2011). Sub center, primary health center, and community health center are the three levels of primary healthcare facilities that serve rural communities. As on March 31, 2021, 2115 SCs, 572 PHCs, 98 CHCs were functioning in Himachal Pradesh (Rural Health Statistics, 2020). At present 741 Health and Wellness Centre (HWCs) were transformed from PHC and SC in Himachal Pradesh (Sood, et al., 2021). According to the 2019 report by Healthy States Progressive India (HSPI II) H.P drops to sixth rank overall with an index score of 62.41, The study indicated that there are serious issues with the indicators associated to primary health care as well as a significant shortage of human resources at the SC, PHC, and CHC levels (Healthy States Progressive India, 2019).

The Himachal Pradesh Rashtriya Swasthya Bima Yojna (RSBY) Society under the Department of Health and Family welfare (H.P) has implemented various schemes to deal with numerous health diseases and to serve the vulnerable population; PM-JAY, HIMCARE, SAHARA, HPUHPS, ABDM, MMCSK.

Figure 1. No of SC, PHC, CHC in Rural Areas of H.P from year 2005 and 2021



(Source: Rural Health Statistics 2020-2021)

Table 2. District wise Functional Centers in Himachal Pradesh

As on 31st March, 2021					
District	**SC**	**PHC**	**CHC**	**Sub Divisional Hospital**	**District Hospital**
Bilaspur	**123**	**38**	**8**	**3**	**1**
Hamirpur	**152**	**32**	**2**	**5**	**0**
Chamba	**177**	**44**	**5**	**6**	**0**
Kinnaur	**35**	**23**	**4**	**1**	**1**
Kangra	**449**	**85**	**19**	**22**	**1**
Lahaul Spiti	**36**	**16**	**3**	**0**	**1**
Kullu	**99**	**23**	**5**	**4**	**1**
Una	**136**	**23**	**9**	**5**	**1**
Sirmaur	**147**	**46**	**6**	**5**	**0**
Shimla	**245**	**115**	**17**	**12**	**1**
Solan	**183**	**42**	**7**	**7**	**1**
Mandi	**334**	**85**	**13**	**13**	**1**
Total Districts	**2115**	**572**	**98**	**83**	**9**

(Source: Rural Health Statistics, MOHFW 2020-2021)

4. TRADITIONAL Vs MODERN MEDICINE

Across the world traditional medicine is the mainstay of healthcare system and serves number of people living in rural areas for their illness treatment. Traditional herbal medicine and medicinal plants have been used in India's tribal and rural regions for more than a century to treat human ailment to promote health (Jaiswal, 2018). Dhanwantri, a Hindu deity of medicine, was described in the Vedic era (500 BCE) as a god of medicine (Health Management, 2020). For centuries, traditional medicine was based on the Ayurvedic system, which was developed

by the physician Charak Samhita, who served as the royal physician of King Kanishka. “According to Ayurveda, the cosmos is made up of a mix of five elements: akasha (ether), vayu (air), teja (fire), aap (water), and prithvi (earth) and uses the tridosha theory of illness to treat patients (Kapha, Pitta, Vata)” (Patwardhan, et.al, 2005). About 60% of the world's population relies on medicinal herbs from India for their primary health care, which is the world's greatest producer (Jaiswal, 2018). In Himachal Pradesh, there are 3400 type of medicinal plants, and the state also introduced a scheme named “HP Van Samridhi Yojana” for rural people to grow medicinal plants in their fields and earn money, for this Rs 10,000 financial assistance is given to them. When compared to other western nations, India, the country of ayurveda, offers a range of particular treatments for various ailments which help in booming the country's medical tourism. By this the number of international tourists visiting India for medical reasons rises from 6.38 percent in 2019 to 6.7 percent in 2020 (James, 2022). These visitors are drawn to the area because of its emphasis on holistic health and the effectiveness of its treatment options.

“The modern system of medicine was introduced to India by the Portuguese in the 17th and 18th centuries” (Tabish, 2000). The number of health centers, hospitals, and other medical institutions has increased over time, but they are still not large enough to meet the rising demand for their services. Constraints like huge population growth, a lack of infrastructure, and low literacy rate, have contributed to the poor health indicators of the nation. There are around 25,000 ayurvedic medical practitioners in India, to about 70,000 in the modern medical field (Jaiswal, 2018). Most people in rural areas seek traditional herbalists instead of modern medical care because of its low cost, but these practitioners are often unqualified to handle medical emergencies and have no reliable referral network available. As a result of the rising prominence of traditional medicine, the Indian government established a separate department called the Indian system of medicine and homoeopathy (ISM&H) known as AYUSH in 1995 and the “Indian government also established a traditional knowledge digital library (TKDL) on traditional medicinal plants to protect their intellectual property rights” (Patwardhan, et.al, 2005). TKDL contains over 34 million pages, provides information on traditional knowledge existing in India. In addition to this “The New Education Policy (NEP)” 2020 of the Indian government has introduced a new stream titled "Indigenous Traditional Knowledge” in order to pay tribute to the illustrious history of ancient India (Gupta, 2022).

Hence, it is important to have a linkage between traditional healers and healthcare professionals and it will help in bridge the gap between the modern and traditional medicine.

5. ROLE OF INFORMATION IN HEALTHCARE

This world relies heavily on information, and it's necessary that it's accurate and reliable in order for any system to flourish. It gives the organization a competitive edge by facilitating decision making, and other aspects of problem solving. Knowledge, competence, and wisdom are all products of the brain's ability to process information (Kaye, 1995). Both the left and right brain hemispheres interpret information differently. The left hemisphere of the brain is primarily responsible for linguistic and analytical thinking, whereas the right hemisphere is in charge of spatial and intuitive understanding (Taggart, 1981). Next to matter and energy comes information, which is a cognitive activity that keeps a system operating (Satija, 2013).

When it comes to providing healthcare, good communication and access to relevant information are essential. The quality of patient care is compromised if information and communication are not adequately delivered to the patient and vice-versa. One of the main reasons that the healthcare sector is vulnerable to market failures is because of information asymmetry, asymmetric information exchange between patients and doctors, which leads to medical errors, as noted by Economic Survey 2020-21. It has been observed that patients are often unaware of the quality of the services they have been offered and rarely know the importance of the information they receive in the healthcare sector. For this a method called "Teach Back Method" has been used to mitigate false information and confirming patient understanding of their health information. This method requires that healthcare worker and patients to repeat all information conveyed to them during health encounters, any misunderstanding or false information should be pointed out and corrected, further all the information is provided in a format that patient can take home (Ratna,2019).

Information and communication are almost synonyms in action and needs a physical medium for its communication storage (Satija, 2015). "In rural communities for transferring health information, two type of information flow is required, first, newly generated health information available to a wide range of potential users form the rural community, second, a particular rural community looking for health information regardless of where it can be found" (Kaane, 1997). By increasing reliable information flow and knowledge distribution, can help in making evidence-based decisions and fulfill diverse social needs. Information in the health sector helps to maintain a good exchange connection with its environment, such as David Kaye's example that if any health sector has generated a new knowledge, advises for the manufacture of a new product, it will contacts with other departments, collects and analyses data and information

provided by them, and make reports, but if there is library and information centers available, it play a larger role in disseminating the health information in-line with health workers. Therefore, the processing of authentic information and successful communication in any organization may benefit greatly from the involvement of libraries and information centers.

6. ROADBLOCKS IN THE PROVISION AND ACCESSING HEALTH INFORMATION

In rural areas there are number of barriers hindering accessing to quality healthcare facilities, some of the key barriers include Poverty ,cultural and social barrier, poor health literacy levels and incomplete perceptions of health, educational and Linguistic disparities, distance and transportation, unpredictable work hours or unemployment ,workforce shortage and shortfall of resources ,poor investment on healthcare and out of pocket spending, lack of access to nutritional diet and physical activity options ,privacy issues and inverse care , corruption, lack of training for health workers and poor infrastructure, disparities between rural and urban healthcare system and lack of health insurance covered(RHIhub). As a result, healthcare providers and policymakers can benefit from proper dissemination and utilization of health information by making informed decisions that enhance individual and community well-being. Despite this, there has been insufficient study of the information needs of rural residents and healthcare providers. In order to create useful and relevant health information products, it is necessary to do a thorough assessment of current needs, as well as available opportunities, barriers, and gaps.

7. ROLE OF LIBRARY AND INFORMATION CENTRES

To bridge the knowledge gaps, the proposed research aims to reshape the library's function in order to develop a framework that will assist health workers and other stakeholders in effective dissemination of information to rural residents and to propose strategic measures to inspire rural communities to work on improving their health. There is one state library, 11 district libraries, 2 city libraries, 13 village libraries, and 918 school public libraries in Himachal Pradesh (Public Library Scenario in India, (n.d.). The Directorate of Public Libraries, Ministry of Culture and Government of Himachal Pradesh need to establish public libraries/ rural libraries at every gram panchayat to manage and disseminate health information, especially to those living in rural areas. In outlying locations, it may be more beneficial to establish specialized health information units,

and serving as a vital connection in the dissemination of knowledge and the propagation of health literacy among the residents. Some of the key role's libraries can play include;

- *Finding community needs and creating information resources*: Libraries are not a health expert but an information expert, libraries to ensure that people seeking health information to the right person in a right format at a right time. Libraries can find the Information needs of rural communities and their problems in accessing information, based on their finding and problems they can develop the resources in a format that community can read and understand and they can also understand the health status of the rural populations with the help of libraries.
- *Repackaging Information*: Libraries can repackage relevant information and health education material produced by govt ministries and from other departments i.e., printed information into audio visual resources, and by translating English language documents into their local languages.
- *Outreach Programmes and Health Promotion*: Health workers play an important role in dissemination of information to the public, they could collaborate with library and information centers in organizing outreach programmes on health issues, digital literacy workshop on the use of mobile phones, regulating exhibitions, explaining the health services and schemes and also answer any query asked by the people. Libraries can also contribute in making them the perfect partner in public health and wellness programmes and education.
- *Government and Non-Government organization Support:* As both healthcare centers (SC, PHC, CHC) and public libraries are public funded agencies, shall partner in health information transfer and raise awareness about chronic diseases among rural people. There is a necessity to develop library health information portals that provides health information to the community. One such facility is HELP (Health Education Library for People), India's first consumer health information center. The program's mission is to promote in health education and to encourage the prevention of medical problems in the family in collaboration with the medical professional (Malpani, 1999). However, NGO's like WHO, UNESCO, FAO, UNICEF can also help in building rural public libraries.
- *Promoting Traditional Knowledge*: In rural areas, people's cultural identities are deeply rooted in oral tradition and traditional knowledge. Keeping traditional knowledge safe and making it more accessible for the future is an important task, and rural libraries may play an important role in this. In order to make health information available to the rural masses, public and medical libraries at the local level should make concerted efforts to document indigenous knowledge in local languages.

- *Retrieval and Storage Platforms for Health Information*: To better assist policy and decision makers and other users of health information, public libraries should have access to computers and the Internet. This will allow them to compile health information on a monthly, quarterly, and annual basis and store it in the appropriate media. As a result, this is a suitable method for archiving data relating to a wide range of chronic ailments. Mobile libraries can also help people with health information sources who don't have easy access to libraries.

8. ROLE OF ICT'S IN HEALTH INFORMATION TRANSFER

The impact of knowledge creation and dissemination on healthcare service quality is moderated by advances in information and communication technology (Colnar, et al., 2022). Information and communication technologies facilitate remote care, foster a different type of relationship between patients and healthcare providers, extend patient-centered healthcare at a lower cost, and improve decision-making by facilitating the efficient flow of information. Non communicable disease and communicable diseases tracking, primary healthcare access, and rural healthcare delivery can all be enhanced through the use of information and communication technologies. When information and communication technology are at their zenith, healthcare delivery achieves its highest efficiency. Tools of ICTs and the internet have come a long way, allowing for instant, two - way communication across distant locations and international boundaries (Nishikitani, et al.,2022). The development of various ICT tools in healthcare like e-health, DHIS, HIS, EMR, telemedicine helps in facilitating the linking of health information to the public and the healthcare providers. During COVID-19, telemedicine has been a boon to those living in remote or rural areas. According to the World Health Organization (WHO), "telemedicine service" is the "delivery of health care services, where distance is a critical factor, by all health care professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of health care providers" (WHO, 2011).

9. REVIEW OF LITERATURE

- **Jayaswal,N. (2015**) According to the research, rural health is a critical issue for development in India, with around 75% of health facilities and other health resources concentrated in urban areas. Despite the fact that numerous government programmes to expand rural healthcare have begun, many are ineffective due to procedural delays in execution. She went on to note

that because primary health care is the initial point of contact for patients in rural areas, there is a need to increase cooperation between primary and higher-level institutions**.**

- **Naughton, J et al. (2021)** His research demonstrates the significance of health literacy, which is critical to person-centered care. Further mentioned are the abilities of NHS knowledge specialists and health librarians in identifying, appraising, and summarizing health research as well as providing information seeking skills to assist healthcare workers to make evidence-based decisions. For the long haul, he'd like to work with the NHS and public libraries to improve the patient communication and the availability of high-quality health information. The health centre and central library will work together to host information - based events as part of this scheme.
- **Rowlands, G et al. (2015)** He found that health materials that combine words and numbers are too difficult for 61% of people aged 18 to 64, which is a major barrier to health.
- **De Castro, et al. (2021)** According to the study, the National Institute of Health established a school-based educational project to enhance health literacy and communication skills. These training courses/ Modules focused on health information themes and the ability to use authentic, reliable sources of information. In certain modules, students create a questionnaire in plain and simple language to survey the general population's health habits; this immediately improves their information handling and effective communication with the public.
- **Kassim, M. (2021)** According to the study, women in some rural areas of countries like Tanzania require a wide range of maternal health information in order to make informed health choices. They wanted to learn about it from medical professionals, but in reality, most of them received it from non-professional and informal sources including community health workers, traditional birth attendants, and their own families. It was also discovered how important it is for women to have access to accurate and up-to-date information about maternal health in order to increase their reproductive health literacy and make informed choices. Community health professionals and traditional birth attendants need more training to provide women with the proper knowledge. It is important to consider the needs and priorities of rural women when assessing maternal health services.
- **Obaremi, O. D., & Olatokun, W. M. (2021)** They studied the use and access to health information among residents of five rural villages in Ibadan, Nigeria, and discovered that rural communities suffer greater challenges in accessing health information. Rural communities obtain health information through sources such as radio, hospitals/centers, and

doctors, as well as traditional herbalists, who are valuable sources for their information needs. They discovered that rural communities confront particular challenges such as financial difficulties, infrastructure issues, long distances, illiteracy, and a lack of information in their native language. They also suggested that strengthening interpersonal communication through linguistic provision and the construction of community health information centers would be beneficial.

- **Islam, M. S., & Ahmed, S. Z. (2012)** they discovered that persons living in rural areas had different information demands and sources to meet those needs. Not everyone in society receives equal access to information. Rural people's information demands are primarily focused on agriculture (where to get pesticides, for example), health (where and how to receive the best treatment), and so on. They also suggested that because oral tradition and traditional knowledge are important components of rural populations' local cultures, there is a need to retain and encourage the use of traditional knowledge in the future, and rural libraries play an important role in this regard, as local public libraries are an important source of information in rural areas. Furthermore, NGOs can play significant role in information dissemination.
- **Nwagwu, W. E., & Ajama, M. (2011)** Data for their study is gathered through focus group discussions and a Questionnaire. They examine the numerous sources of information as well as their information-seeking behavior. Women, in particular, rely on radio and traditional sources for health information, and they primarily seek information for themselves and their children. They also desire health information on diseases like as malaria, which they primarily obtain from relatives, family, and friends. They discovered problems such as language, religious barriers, men's domination, insufficient services provided by health centers, a lack of confidence in using sources, and economical reasons. They also recommended that mass literacy and education programmes, as well as awareness campaigns, be carried out in rural areas.
- **Panikar, P. G. K. (1976)** their research demonstrates an urban bias in the facilities and resources that should be offered to rural communities because the health situation is worse in rural areas but are only provided to urban areas. a few primary health care centers to serve rural communities; unfortunately, the primary health care centers are ill-equipped, understaffed, and inadequately stocked with drugs and other supplies. The weaker status of health in rural areas necessitates a higher priority for the provision of medical treatment there. Any health-care system should be evaluated based on its effectiveness as measured by

improvements in health standards as well as its cost. As a result, immunization, improved water supply, sewage, environmental sanitation, personal cleanliness, and nutrition should be emphasized in our health-care system**.**

- **Banerjee, A, et al. (2004)** In their study, they carried out a survey on the delivery of health care in rural Rajasthan, and they discovered that the quality of the amenities offered seems to be very low, and they are provided by untrained staff who are required to be qualified according to specific guidelines about what they can and cannot treat.
- **Kaane, S. (1997)** The study found that there are two ways in which health information is transferred to rural communities: first, new health information is disseminated to a wide variety of potential community users, and second, rural communities demand information from wherever it can be obtained. Many people have access to radios, and some even take them out into the fields with them, so this medium may be the most effective for disseminating health information to a wide audience. Some approaches are proposed for how public libraries and librarians can reformat materials in a community-accessible format for a wider audience.
- **Aboyade, B. O. (1984)** The research project RUDIS (Rural Development Information System Research) implemented a pilot library service in Badeku village. In the village, residents filled out a series of questionnaires about their informational needs and local communication network while using their native language. Newspapers, posters, film tapes, pamphlets, reference (answers to specific questions), and referral services (referring people's needs and complaints to ministries or groups that can help), provision of radio programmes on health care, and translation of English written materials into their local language are just some of the services provided by the RUDIS team at each and every visit. The rural community also seeks information on health, daily problems, education, occupation, and other topics. Overall, the results of the pilot project suggest that the library has considerable communication potential among non-literate people, particularly in rural areas. The Badeku pilot project proved that even though the library is primarily based on written literacy, it can be designed to meet the information needs of non-literates in a number of ways that other channels of communication cannot.
- **Ray, S. (2007**) The PARIKAS (Paarivar kalayan Salahkaar Samiti) initiative was launched by the HP government to monitor healthcare delivery and boost health and family welfare activities in village panchayats, and this paper investigates the role that Gram Panchayats play in this process. He has selected the districts of Kangra, Una, Sirmaur, and Solan. At 22%

of the total population, Kangra is Himachal Pradesh's most populous district. According to the results, the GPs in the study areas failed to meet minimum requirements in several key areas: formulating local (health) plans based on community needs assessment; communicating with residents; and implementing health-related programmes. Additional study is needed to determine the factors that contribute to the success or failure of decentralized health care initiatives in rural HP.

- **Bii, H. K., & Otike, J. (2003)** The purpose of this paper is to report the findings of an investigation into the health information needs of the people of Bomet District, Kenya. It was found that people in rural areas have a wide variety of health information needs, the vast majority of which are associated with the specific health issues they're facing. Some people's needs have not been met or satisfied by the currently available information resources and services because of the many obstacles in the way of them getting to the health information they want. Recommendations include investing more resources into health-related discussions and other events, as well as health-related visual media, adult education, broadcast and print media, with an emphasis on rural areas, and health-information communication infrastructure. Health education should be taught in schools as well as information centres in rural areas. It is also recommended that the Ministry of Health establish a policy to expand access to health information.

10. OBJECTIVES

The overall aim of the study is to find out the role of libraries in health information transfer and to study the effectiveness of existing channels of health information transfer and suggest the best possible solutions.

1. To study the existing channels of health information transfer process in the rural communities of Kangra District of Himachal Pradesh.
2. To study the health information needs, awareness, seeking behavior, problems, and the sources used by the rural communities.
3. To study the information needs at Sub Centre (SC), Primary Health Centre (PHC) and Community Health Centre (CHC) levels.
4. To identify the barriers in delivering and accessing health information.
5. To find out how the libraries and information centers can help in the health information transfer process.

11. HYPOTHESES

1. Majority of the rural people are not aware of the new health information and are not fully benefited from the public health programmes.
2. Transfer of new health information will be effective if an integrated approach involving public health departments, libraries and information centers, local bodies are involved in the information transfer channels.
3. People in rural areas usually rely on traditional medicines as their first choice of care.

12. STUDY AREA

Himachal Pradesh: An Overview

"Himachal Pradesh is a state in the northern part of India, situated in the Western Himalayas and around 90% of the state's population lives in rural areas" (Himachal Pradesh - Wikipedia, 2011). "It has a total population of 6,864,602 including 3,481,873 male and 3,382,729 female and contributes 0.57 % of the total population in the country" (Census of India, 2011). A literacy score of 86.6 percent places Himachal Pradesh among the top 10 literate states and UTs in India as of 2022 (News 18, 2021). "There are 12 districts in Himachal Pradesh out of which Kangra District was top-ranked with population strength of 1,507,223 (21.98%)" (Himachal Pradesh - Wikipedia, 2011). For the present study rural areas of Kangra district will be selected.

13. RESEARCH DESIGN AND METHODOLOGY

13.1 *Data collection methods*

Both primary and secondary data will be used for the study. Qualitative survey will be conducted using primary and secondary sources. Open structured questionnaires and semi-structured personal interviews would be the main tools for gathering primary information. Secondary information would be collected from journals, books in health sector and through electronic and non-electronic sources.

13.2 *Selection of respondents*

The primary data would be collected from four groups namely Sub Centre, Primary health centre, Community health centre and select rural communities. Besides this, an in- depth interview of key informants will also be conducted to collect qualitative data.

13.3 *Pre-testing*

10% of the total sample respondents (health centers and rural communities) would be contacted for pre-testing of questionnaire. The final questionnaire would be designed after altering, modifying and deleting the statements on the bases of pre-tested questionnaire.

14. SAMPLING

There are approximately 1,507,223 (21.98%) population living in Kangra District. The proportional sample may be obtained using Yamane's formula for calculating sample size in case of finite population.

15. TENTATIVE CHAPTERISATION PLAN

1. CHAPTER ONE: Introduction
2. CHAPTER TWO: Healthcare delivery system, Health Information Needs and Seeking Behavior of Rural People
3. CHAPTER THREE: Review of literature
4. CHAPTER FOUR: Research methodology
5. CHAPTER FIVE: Data analysis
6. CHAPTER SIX: Problems and Findings
7. CHAPTER SEVEN: Conclusion and recommendations

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Appendices

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विद्या वाचस्पति
उपाधि की आंशिक पूर्ति में
हिमाचल प्रदेश केंद्रीय विश्वविद्यालय
को जमा किया गया शोध-सारांश

Information Needs and Seeking Behavior of Farmers of Hilly Terrain: A Study of Select Districts of Shivalik Region of Himachal Pradesh

A synopsis
Submitted to the Central University of Himachal Pradesh
in Partial Fulfilment of the Degree of

DOCTOR OF PHILOSOPHY

स्कूल / In the School of Mathematics, Computer & Information Science
विभाग / In the Department of Library and Information Science

पर्यवेक्षक / Under the Supervision of Dr. Shivarama Rao K.

By

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माह एवं वर्ष / Month & Year : December, 2022

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Introduction:

Agriculture is an important economic activity of developing countries. Most of the country's population depends on agriculture and agri-allied sectors. India is an agricultural country, which is very important to the world economy. In India, agriculture is the most important source of income, as 70% of rural households depend directly on it. (FAO,2022). Among all countries, India ranks second worldwide in farm outputs. India's agriculture employs 42 % of its workforce and contributes 17-18 % to its GDP.

India is the world's second most populous country, with approximately 1.35 billion inhabitants. As per the reports, 66 % of the population lives in rural areas (IFAD,2022). India is a multicultural nation, where 415 dialects of more than 22 major languages are spoken. The country is home to a wide agro-ecological diversity due to its proximity to the most extensivemountain range in the world, the Himalayas, the Thar Desert, the Gangetic Delta, the East, and the Deccan Plateau in the north, west, east, and south respectively. As well as producing the most wheat, rice, groundnuts, sugarcane, fruit, vegetables and cotton in the world, India is thetop producer of milk, pulses, and jute.

India's economy is the third most valuable in the world after the United States and China, with a total worth of $ 2.1 trillion. The country's primary exports include spices, fish, poultry, livestock, and plantation commodities. (FAO,2022). Agriculture is a highly information-intensive sector as many activities rely on it. The timely availability of correct scientific information helps farmers solve various complex problems like land use and pesticides, weather forecast, selection of crops, market selection, etc. Information is considered the fourth essential component of human life after "Food, Cloth, House". Long back, access to information was limited to selected elite people through libraries and print media, and later through Radio, Television, etc. The invention of the internet, web, and mobile technologies has democratized information availability. The mobile and internet have facilitated people with easy access to massive amounts of information.

Ministry of Agriculture & Farmers' Welfare (MA&FW), Government of India (GoI) has developed an integrated ICT strategy to benefit the farmers. The key aim is to increase farmer awareness, knowledge, and efficiency. This will not only improve farmers' efficiency but also monitor schemes. Different ICT strategies have been developed to empower different sectors of rural society.

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National e-Governance Plan for Agriculture: The program's goal is to speed up national development through ICT to provide timely agricultural information to farmers. The Department has developed a farmer's portal (www.farmer.gov.in) to facilitate the dissemination of agriculture-related information. This portal has all the information about seed varieties, storage facilities, pests, plant diseases, best practices, watersheds, etc. The availability of accurate real-time information is a continuous challenge in agriculture. The low agricultural yields that follow from a lack of access to resources, services, and markets directly result from this shortage. Workers increase their output with improved access to financial resources and services. (World Bank, 2016). Farmer losses are caused by a lack of information at the right time. Technology has a significant role in bridging such gaps. With this technological advancement, various agricultural applications were developed. Some of the key projects are Digital Mandi (Electronic Trading Platform for Agro Commodities), aAQUA (Farmer's Discussion Forum), eKrishi (Education of Farmers), and E-choupal (E-procurement of agriculture products), eSagu (web Based agriculture advisory system).

Today not only are the agriculture extension channels helping farmers, but multiple channels are available to transfer knowledge to farmers. Farmers are seeking information from several channels, which are very convenient and easily accessible to them. Agricultural services can be delivered via mobile phone because smartphones with internet penetration in rural areas are only 18%. The government has developed different mobile applications to help farmers access critical parameters, including weather alerts, crop protection, market prices, agro-advisory, input dealers (seeds, pesticides, fertilizers, farm machinery, etc.) soil testing, soil health card,crop insurance, etc.

The present research is proposed to undertake the information need and seeking behavior of the farmers of hilly terrain. Agriculture is the heart of the economy of Himachal Pradesh as it is the main occupation of most of the state's population. According to the 2011 census, 70% of Himachal Pradesh's workforce is directly involved in agriculture or horticulture, while 89.96% of the state's population resides in rural areas. The state generates the bulk of its revenue from cash crops. The Department of Agriculture of Himachal Pradesh and other agencies strive to serve the farming community and increase productivity, production, and profitability by implementing relevant technology. There are many different schemes and programs being implemented by the state government of Himachal Pradesh to help farmers become self-sufficient in agricultural output and to better the farmers' economic situation. Some key schemes and programs are Soil Testing Programme; Plant Protection Programme; Crop Insurance

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Scheme: The Pradhan Mantri Fasal Bima Yojna (PMFBY) for Kharif season Crop; Mukhya Mantri Nutan Polyhouse Yojna, Pradhan Mantri Krishi Sinchai Yojna; Krishi Kosh; Kishan Saman Nidhi Yojna Prakritik Kheti Khushal Kisan Yojna farming which encourage "Zero Budget Natural Farming".

What is Information Seeking Behavior, and why is it important?

Information refers to structured data which has been processed. It is an integral part of our survival and advancement. Information is the transmission of knowledge about past events or conditions based on observations, research, or personal experience. Information seeking and sources, both passive and active, are all types of human activity considered to fall under the umbrella of information behavior. The origins of human-seeking behavior are found in work on the users of libraries. In 1948, the Royal Society of Science and Information held a conference that led to the development of the modern study of human information-seeking behavior. To gain a better understanding of how people use information as a source of information in their work, a variety of survey studies were conducted regarding their use of libraries. Information Seeking behavior is a broad term in library and information science that refers to the study of how users search for information, the way they use that information, and their subsequent behavior. Information user needs and seeking behavior are essential components of library research for determining the actual information needs and seeking behavior of the population for whom the information services are being provided.

Information Seeking Behavior Models

The field of information-seeking behavior can be examined through the lens of five prominent models. The first one was Wilson's (1981) model, which was based on the assertion that information is a secondary need required to satisfy the primary need. In the process of that, the person faces different kinds of challenges. Dervin, in 1983, developed a sense-making theory based on the trinity of elements. These elements are Situation, Gap, and Outcome. A bridge is the fourth essential component that connects all these three elements. Ellis' (1989 and 1993) developed a behavioral model consisting of eight different features of the information-seeking process. Kuhlthau's (1991) extended the Ellis model describing the information search process in six stages. Later in the year 1996, Wilson's revised his 1981 model as per the drawing understanding of other fields like psychology, health communication, communication research, etc.

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Role of agriculture universities in disseminating information: Most of the world's poor (78%) are found in rural areas and rely heavily on agriculture for survival. By 2050, the world's population is expected to reach 9.7 billion, and development in agriculture is a powerful tool for reducing extreme poverty, enhancing shared prosperity, and feeding that many people. (World bank,2022). To reduce poverty, agricultural growth must be given particular attention. In addition to its high calibre of human resources, equipment, and other resources, universities play a significant role in producing the knowledge and technologies necessary to sustain agricultural growth through their research programs. University teaching programs shall be focused on experiential learning and problem-solving techniques so that high-quality graduates are prepared to solve the myriad problems in food and agriculture. To promote agricultural research and development in India, there are various agriculture organizations. A total of 103 agricultural research institutes are part of the Indian Council for Agricultural Research (ICAR). The agricultural sector is supported by 75 Agricultural Universities, 82 Projects, and 11 Agriculture Technology Application Research Institutes, all of which are aided by 721 KVKs(Krishi Vigyan Kendras) in the districts to assess and demonstrate the technology and developfarmer capacity. It has contributed significantly to agricultural research, education, frontline extension, and capacity-building activities, making it self-sufficient in the agricultural sector. In Himachal Pradesh, there are different agriculture/horticulture institutions that offer technical advice direct to farmers. These institutions have changed the rural scene in Himachal Pradesh.In all four agro-climatic zones of the state, there are three regional research stations and ten substations. The University has produced and published 168 enhanced crop varieties for different state regions. More than 100 agriculture technologies are recommended to farmers. To increase crop and animal productivity, the University has developed crop improvement, animal breeding, disease battling, natural resources management, etc. The National Agricultural Higher Education Project has supported the University's creation of an Advanced Centre on Protected Agriculture and Natural Farming, which explores the safety of farm products.

Role of libraries in agriculture knowledge transfer: Libraries and information centers have played an essential role in transmitting agricultural knowledge to society. To increase the use of agricultural resources in agriculture teaching, research, and extension services, libraries and information centers play a crucial role. In the digital age, libraries are being reinvented into e-libraries, online libraries, virtual libraries, etc. This means that information, resources, study research, extension, and materials can now be accessed online. Access to information is easy today, and users use documents in various formats, including electronic resources, electronic

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books, electronic journals, reprints, references, and online information. E-Agricultural Libraries provide various services, including Current Awareness Services (CAS) and Selective Dissemination of Information Services (SDI), as well as Awareness and Orientation Programs/Training Programs for agricultural scientists, researchers, and farmers. Indian Council of Agricultural Research (ICAR) has significantly contributed to strengthening and modernizing agricultural libraries. As part of NAIP, ICAR established the Consortium for Electronic Resources in Agriculture (CeRA) and the eGranth program.

Krishikosh is an institutional repository and is a good example of collection development and e- resource sharing in the digital era. This consortium aims to bring together several libraries to develop the existing research and development information resources of ICAR institutes and universities. AGRIS is the international agricultural sciences and technology information system. It was founded in 1974 by the Food and Agriculture Organization of the United Nations (FAO) to facilitate information exchange and collect international literature on all aspects of agriculture.

Agriculture knowledge is managed and disseminated to farmers primarily through agriculture extension departments. Creating separate agriculture information divisions or rural libraries for remote farmers can be more valuable. They can act as essential links in the dissemination of information and in imparting information literacy. There is a considerable challenge in identifying the information needs of farmers living in villages. A library's role is to provide information to farmers systematically that is convenient to them. Due to low literacy levels, most Indian farmers find it difficult to understand most of the agriculture information available in written form. Research findings are irrelevant if farmers cannot make use of them.

Literature Review

A literature review is an essential part of the research. It portrays the previous theoretical and empirical research done in the domain based on identifying the knowledge gap and defining the problem. The general and agriculture domain-specific studies indexed in Scopus were selected for the multi-level review. In social science research, Scopus is the most popular as its coverage is comparatively higher than the other databases. Scopus is a product of publication giant Elsevier. The studies related to farmer-based information need; information behavior of the farmers was reviewed. The scholarly publication by select agriculture scientists was also studied to understand the research trends in the domain. The existing information behavior models were also studied.

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Elly and Silayo (2013) researched the information requirements of Tanzania's farmers and the different informational resources that were available to them in the Iringa rural district especially. This study collected primary data from various farmers using survey and interview methodologies. Information regarding agricultural and livestock farming, marketing, financial alternatives, and value-added products was recognized as the needs of Tanzania's farmers.

Mwalukasa (2013) evaluates the credibility of agricultural information sources to better prepare for the effects of climate change. In this study, we used a semi-structured interview to collect qualitative and quantitative data from various farmers. The results showed that farmers relied on their friends, family, and acquaintances as their primary source of information, with public extension agencies coming in second. It was discovered that farmers relied most heavily on personal networks (such as friends and family) and secondarily on public sector extension programs. There were high-tech resources (like the internet and e-mail) and traditional resources (like books) available in the study area, but nobody was using them.

Widiyanti(2021) examines the information requirements and search habits of two key generations in the farming industry: millennials and progressives. Data for this study was gathered through a series of semi-structured interviews with 15 farmers, including 10 millennial farmers and 5 progressive farmers. The research showed that young farmers today are more likely to use resources from different groups to gain access to new technologies and form effective business partnerships. The forward-thinking farmers investigated USDA statistics on farm automation and quality assurance programs. They also talked to acquaintances in the industry to get their take on the market.

Naveed & Anwar (2013) studied the agricultural information needs of 84 Pakistani farmers The study concluded that traditional print media and broadcasting performed a supporting role in the information gathering process. A language barrier, a lack of education, and a lack of time made it hard for these farmers to get the information they needed. The research results will help tailor the development of information infrastructures serving rural farmers.

Okwu and Umoru (2009) studied women farmers' information needs and access in the Apa local government area of Benue State. According to this study, most women farmers need information about farming, especially insecticides, fertilizers, and better farm tools. In the study area, people mostly asked their husbands and other women for information about farming.

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Seenuanknew et al. (2018) studied the Thai farmers' need for and desire for information led to the creation of a mobile phone app to help with production and sales. This study obtained its data by conducting in-depth interviews, taking field notes, and collecting observations. In this study, the researchers demonstrate that farmers need information on how to boost productivity, enhance quality, lower costs, generate products, develop marketing channels, and shift to shorter-lived crops.

Madhavan (2017) investigated farmer needs for agriculture information in the Thrissur district. This study used various statistical tools to analyze the data, including simple percentages, scores, indexes, and Chi-squares. Government schemes, such as loans and subsidies, are the farmers' most important agricultural information needs in the study area, followed by market information.

Singh et al. (2016) investigated dairy farmers' information needs and seeking behavior in Punjab. A structured interview schedule interviewed 102 farmers at Guru Angad Dev Veterinary and Animal Sciences University (GADVASU), Ludhiana, during the Pashu PalanMela (Livestock Fair). In this study, 70% of farmers needed information about government subsidies, followed by 70% on animal breeding, feed, and fodder. Pashu Palan Mela and animal welfare camps provided farmers with 89.21% of the needed information, and newspapers and television provided 85.29%.

Chunera & Amardeep (2018) examined climate change adaptation information needs and communication preferences among farmers in Uttarakhand's hilly regions. With the help of a pre-tested interview schedule, 300 men and women farmers were selected from the villages using the Probability Proportionate to Size method. Farmers' most common information needs regarding climate change adaptation strategies were water harvesting schemes, crop management strategies, drought/flood tolerant crop varieties, animal disease control, climate change-tolerant livestock breeds, quality of feed and fodder, access to credit, climate-smart agriculture practices, and insurance. Moreover, farm and home visits were the most popular methods of receiving information farmers need to know how to adapt to climate change, which will take a lot of work and the use of new information and communication technologies.

Neogi and Pratap (2021) investigated agricultural researchers' information demands and information-seeking behavior at Pundibari, Cooch Behar, West Bengal (India). In this study, 76.40% of respondents went to the library to exchange or return books, whereas 59.55%

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obtained electronic material. Furthermore, 69.66% of respondents particularly sought information from the library to create articles, whereas 55% specifically sought material for research work. 73 percent of respondents reported having little time owing to ordinary teaching, research, and administrative tasks. 48.31% indicated they are unaware of library resources and services, which is a significant obstacle to obtaining the information they seek.

Importance of the study: This research aimed to provide insight into the information needs of farmers of Himachal Pradesh and their experiences of seeking information from existing systems. This approach can help to develop an effective and efficient information support system for the farmers. The findings of this study will assist the government and administration in providing farmers with more effective agricultural techniques to aid the nation's development. Agri-services may be developed based on the study's findings. Many studies were designed to meet the needs of Students, faculty, engineers, library users, business, organizations, or advocates. This study, however, is primarily concerned with fulfilling the needs of farmers of Himachal Pradesh. Considering their information needs and sources, thisstudy is significant for farmers in the Shivalik hill zone, H.P., in their daily agricultural lives.

Problem Statement

Himachal Pradesh is located on the northern edge of the majestic Himalayas, sharing borders with Jammu and Kashmir, Punjab, Haryana, and Uttar Pradesh as an international border with China. Himachal Pradesh covers an area of 55,673 square kilometers. The state primarily relies on three economic sources: hydroelectric power, tourism, and agriculture. In Himachal Pradesh, roughly 55.673 million hectares are farmed by 8.63 lakh farmers. Small and marginal farming communities own almost 84.5% of the land. Only 10.4% of the land in the state is cultivated, although 80% of the territory receives annual rainfall. Himachal Pradesh is often known as the "Apple State of India" due to its large-scale fruit production. Wheat, rice,maize, barley, ginger, seed-potato, vegetables, mushrooms, olives, etc., are grown in Himachal Pradesh.

The literature review shows that extensive research has been done to understand the information behaviors of farmers of different regions of India and the world. The research conducted by the agriculture scientists of Himachal Pradesh mainly focused on scientific analysis of farming activities like soil testing, seed quality, rainfall etc. Lacking the analysis of the parameters per the information science perspective. It is evident from the literature that

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farmers face a lack of timely availability of information and inadequate access to information. They face multiple challenges in selecting the source and accessing the correct information conveniently in an economical way. However, the economic availability of high-quality information serves as the most effective tool for farmers to make efficient decisions. Radio and television broadcasting in India is well established, but their links to agricultural development, in particular extension, are weak. A telephone is available, but its connectivity is inefficient and unreliable. Personal computers are reserved for office use. Computer skills are severely lacking. ICTs are mainly unknown to most people living in developing countries in Asia, and even if massive ICT infrastructure were built, most of the farmers living in developing Asia would not be able to take advantage of it because they lack the necessary skills as access to I.T. infrastructure.

Several studies claimed that the farmers preferred to seek agriculture-related information from friends/fellow farmers, or local experts. The government has proposed various schemes and initiatives for the agriculture field. But the question is, do the farmers benefit from these initiatives? Do the farmers take advantage of these schemes? Governments and agriculture departments have tried to train and educate farmers about advanced and sophisticated agricultural technology; success cannot be assured unless farmers put the same into practice. There is a limited flow of information regarding the latest agri-technologies since agricultural extension workers cannot reach every farmer, and farmers cannot attend agricultural fairs. Therefore, one of the significant barriers to economic and human progress is poverty. Around 2.1 billion people are poor worldwide, and 767 million continue living in extreme poverty. Nearly 75% depend on agriculture for their livelihood and reside in rural areas. East Asia, South Asia, and sub-Saharan Africa account for 95% of the world's rural poor (World Bank, 2016). The United Nations Food and Agriculture Organization (FAO) supports governments and other partners in developing successful policies and programs to help end world hunger, advance food security, and support sustainable agriculture for billions worldwide. To end poverty and hunger, protect the planet's natural resources, and secure prosperity for all by 2030, FAO will adopt 17 Sustainable Development Goals (SDGs).

The present research aims to explore the information needs and behavior of farmers of Himachal Pradesh in the digital era. The research conducted by the agriculture scientists of Himachal Pradesh mainly focused on scientific analysis of farming activities like soil testing, seed quality, rainfall, etc. To address these challenges, the following research questions are proposed:

1. What kind of crops are grown in the Shivalik zone at different times?
2. What are farmers' information needs?
3. What are the various sources of information farmers use?
4. Farmer's awareness of the government's programs/Schemes?
5. What is the impact of ICT on farmers' information needs?

Objectives:

1. To analyze the socio-economic characteristics of farmers in the Shivalik zone of the H.P.
2. To study the information needs, awareness, seeking behavior, problems, and challenges of farmers under the study.
3. To study the existing channels of agriculture information transfer.
4. To find out the sources of agricultural information used by the farmers.
5. To find out how libraries and information centers can help transfer in the transfer of new agricultural information to farmers.
6. To find out the barriers to transferring information from the agriculture lab to farmers.
7. To suggest a conceptual information-seeking behavior model for the farmers.

Hypothesis: A hypothesis is used to gain proper direction in research work. Based on a research topic and some presumptions, a hypothesis can be true or false at the end of the research work. The following hypotheses will be tested using appropriate statistical methods.

1. There is no significant relationship between agricultural information needs and agricultural information sources.
2. Information seeking on modern technological platforms is preferred over traditional platforms.
3. Union and State government schemes for agricultural development are unknown to farmers.
4. Agricultural University Libraries, collaborating with public libraries can play animportant role in transferring new agricultural information to farmers.

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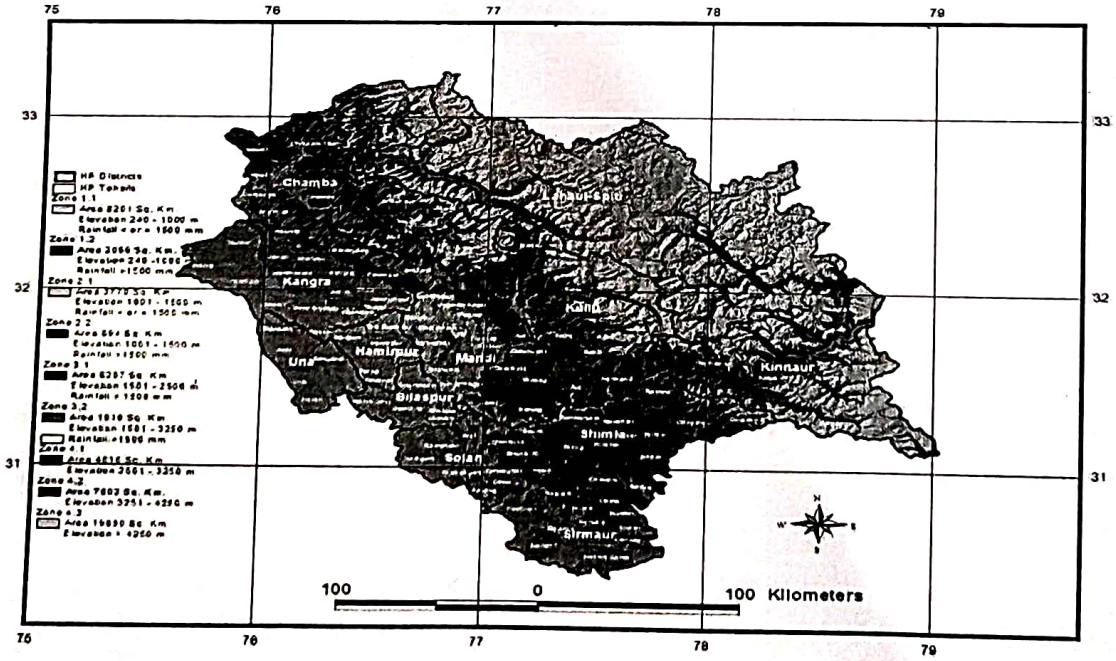
Research design and Methodology

Data collection methods: Two surveys will be conducted simultaneously for this research. A first survey will be created to get pertinent data from agriculture scientists, extension agents, and KVK, and a second, in-depth interview schedule will be created to gather information from farmers. Both surveys—one for agricultural information consumers and the other for agricultural information disseminators—have connections and rely on one another. This research survey method will provide an in-depth analysis of farmers' information needs, information sources, the latest trends and technologies, and issues regarding information-seeking behaviors. A questionnaire is more convenient for collecting relevant information about the agriculture scientist extension worker, KVK. The secondary data will be gathered from various agriculture-related government offices, agriculture universities in H.P., and related publications, journals, and reports.

Study Area: The state has been categorized into four agro-climatic zones based on its topography, soil, and climate: Sub-Mountain and Low Hills Subtropical Zone (Zone-I), also known as the Shivalik hill zone; Mid Hills Sub-humid Zone (Zone-II); High Hills Temperate Wet Zone (Zone-III); and High Hills Temperate Cold Dry Zone (Zone-IV). The research willfocus on the Shivalik hill region of Himachal Pradesh. Wheat, Maize, Paddy, Black Gram, Sugarcane, Mustard, Potato, Vegetables, Pulses, and Barley are the essential crops farmed in the Shivalik hill region.



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Sampling: Random sampling/Multistage sampling will be used to collect the data from the respondents. The sample size for this study will be illustrated using Yamane (1967:886) simplified formula tocalculate sample sizes (Izerimana,2020).

$$n = \frac{N}{1 + N(e)^2}$$

n=sample size; N=population size; e=level of precision.

Pre-testing: Pre-testing of the questionnaire will be conducted with 10% of the total sample (Scientists, Extension workers, and Farmers). After the pre-test questionnaire may be modified for finalizing the questionnaire.

Method of data analysis using statistical tools and techniques:

1. This study will use descriptive statistics like Arithmetic Mean, Standard Deviation, and Coefficient of Variation to analyze the data collected.
2. Inferential statistical tools will be used to study the nature of the collected data, such as Hypothesis testing (Z Test, F Test, T-Test) and Regression analysis.
3. Graphs, tables, and charts will be used to present the data.
4. The data analysis will be done by using SPSS software and R programming language.

Chapterization

The thesis chapterization scheme is as under:

Chapter: 1 Introduction

Chapter: 2 Review of Literature

Chapter: 3 Models of Information Seeking Behaviour

Chapter: 4 Research Design and Methodology

Chapter: 5 Data Analysis and Interpretation

Chapter: 6 Findings, Conclusions, and Recommendation

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Appendix A: Questionnaire and Interview Schedule

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हिमाचल प्रदेश केंद्रीय विश्वविद्यालय

Central University of Himachal Pradesh

[Established under the Central Universities Act 2009]

Synopsis
Approved by RDC
on dated:- 29-12-2022

विद्या वाचस्पति

उपाधि की आंशिक पूर्ति में

हिमाचल प्रदेश केंद्रीय विश्वविद्यालय

को जमा किया गया शोध-सारांश

INFORMATION LITERACY OF FACULTY MEMBERS AND RESEARCH SCHOLARS OF CENTRAL SANSKRIT UNIVERSITY: A CASE STUDY

A synopsis

Submitted to the Central University of Himachal Pradesh

in Partial Fulfilment of the Degree of

DOCTOR OF PHILOSOPHY

स्कूल / In the School of Mathematics, Computer & Information Science

विभाग / In the Department of Library and Information Science

पर्यवेक्षक / Under the Supervision of Dr. Shivarama Rao K.

Submitted by

Vikramjeet

पंजीकरण / Registration No.: CUHP20RDLIS04

माह एवं वर्ष / Month & Year : December, 2022

हिमाचल प्रदेश केंद्रीय विश्वविद्यालय

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1. INTRODUCTION

Information plays a significant role in the teaching and learning process, so both teachers and students need to use information more wisely. There are a plethora of information sources available today; however, the free use of information is impacted by some legal considerations as well as the fact that information has economic value and has become a commodity. The academic community has to have the capability to make effective use of information with value added in the appropriate setting. The development of the appropriate information literacy abilities is an investment in the future of efficient information use.

1.1 Information Literacy

Literacy is defined broadly as the capacity to speak, write and read. However, there are several sorts of literacy, including audio-visual literacy, digital literacy, web literacy, technical literacy, media literacy, functional literacy, library literacy, print literacy, computer literacy and information literacy, among others. Information literacy differs from other types of literacy in that it combines all of these concepts while going beyond basic literacy.

Information literacy (IL) is the skill to discover, retrieve, analyze, and utilize information. There is an urgent need for skills in searching and recognizing information sources due to the information explosion. The development of specialized information literacy abilities is essential for the emergence of a knowledge-based society. In other words, information literacy enables individuals to become independent lifelong learners and to continue to expand their knowledge throughout their lifetimes. Those with these abilities will be able to transfer their knowledge from a familiar environment to an unfamiliar one.

1.2 Definitions of Information Literacy

Paul Zurkowski (1974) defined information literacy as "People trained in the application of information resources to their work can be called information literates." The ALA Presidential Committee defines IL as "To be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information" (ALA, 1989).

Chartered Institute of Library and Information Professionals (CILIP) defined "Information literacy is the ability to think critically and make balanced judgements about any information we find and use. It empower us at citizen to develop informed views and to engage fully with society" (CILIP, 2018).

According to College and Research Library IL is "a set of abilities requiring individuals to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information" (ACRL,2000).

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1.4 Information Literacy Models

There are various information literacy standards developed by various authorities, and many thoughtful individuals have also contributed to the literature, such as:

- ACRL information literacy competency standards for higher education;
- Council of Australian State Libraries;
- SCONUL- The Society of College, National and University Libraries, UK,
- Empowering 8 Model by NILIS - National Institute of Library & Information Sciences Sri Lanka,
- IFLA International Standards for Information Literacy;
- The Big6 Model by Michael Eisenberg etc.

1.5 About Central Sanskrit University

Rashtriya Sanskrit Sansthan was established by the Indian government in 1970, following the recommendation of the Sanskrit Commission (1956). Its chief goal was to encourage, spread, and keep up education, teaching and research in Sanskrit all over the country. It was paid for in full by the Ministry of Human Resource Development, which is now called the Ministry of Education.

As of May 7, 2002, the Indian government recognized it as a Deemed to be University for its work to keep and spread traditional Sanskrit education. The Central Sanskrit Universities Act, 2020 changed the name of the Rashtriya Sanskrit Sansthan (RSS) to the Central Sanskrit University (CSU), Delhi on April 30, 2020. Their main campus is in New Delhi, but they also have 12 other campuses in different parts of India. Central Sanskrit University has 58 affiliated institutions spread across India in addition to its own campuses. The Central Sanskrit University has more campuses than any other university in the world that teaches Sanskrit. The Government of India has designated it's as the coordinating body for the implementation of policies and schemes pertaining to Sanskrit. In this role, the university collaborates closely with the Indian government's Ministry of Education.

2 STATEMENT OF THE PROBLEM

In this information age, the information needs of the users has gradually changed from printed to electronic and there is a great need to study the information literacy skills of faculties and research scholars of various Campuses of Central Sanskrit University, so as to evaluate the information literacy skills and other key issues related to essential information literacy skills required by Central Sanskrit University faculty and research scholars. The research problem is conceived under the title **"Information Literacy of Faculty Members and Research Scholars of Central Sanskrit University: A Case Study".** The results of this study can be generalized to all those universities having similar teaching and learning system, policies and circumstances.

2.1 Definitions of the Concepts

The scope and content of the terms used in the title of the proposed theme are defined to avoid the ambiguity in the usage.

2.1.1 Information: "Knowledge gained from investigation study or investigation"

(https://www.merriam-webster.com/dictionary/information)

2.1.2 Information Literacy

IL is the capacity to acknowledge the information needs, to discover relevant information, to analyze that information, to organize that information, to effectively produce, use, and transmit information in order to fulfil those needs or problems. It is necessary for successful participation in the knowledge available in society, and it is an essential component of the fundamental human right to continue one's education throughout one's lifetime (UNESCO, 2003).

2.1.3 Skills

Skills for finding and interpreting information, including using a book's index, finding books on library shelves, and using search engines (Feather and Sturges,1997).

3. REVIEW OF LITERATURE

In the realm of study, a thorough review of the literature has always been essential. It plays an important role in that it can define and limit a specific research topic. By completing a literature review, one can gain a better understanding of past work on a specific issue, allowing the researcher to focus on areas that have remained undiscovered. However, carrying out a comprehensive review of the literature also benefits in avoiding repetitive study.

Review of Literature is the process of reviewing the relevant literature in the form of journals, periodicals, review, abstracts, handbooks, monographs, surveys, and other reference materials in the field of education to help a researcher create and construct his own research methodology. In review of literature, a detailed review of the related studies in terms of their relevance to the study under investigation has been presented. In the past, there has been a lot of research studies conducted on academic achievement by the research investigators. However, only the literature pertaining to the independent variables used in the present study is referred systematically.

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Partap, Bhanu (2021) conducted a study at Chaudhary Charan Singh Haryana Agriculture University, Hisar, to assess the information literacy abilities of undergraduate students from rural areas. A well structured questionnaire has been distributed among 200 students and 157 returned back. The study revealed that the students from rural areas have moderate information literacy skills, to find, use and share their desired information in ICT era and social media. The respondents expected the University's administration to hold information literacy programmes at various levels on a regular basis so that they could stay up to date and improve their ability to use the necessary information effectively.

Rao, A and Shokeen, A (2021) conducted a study entitled "Health Information Literacy among the rural women: A Study of Kurukshetra District of Haryana". The primary objective of the research was to find out how many rural women in the Distt of Kurukshetra know about health information. The data was collected utilising a multistage sampling procedure with a self-structured questionnaire. 150 questionnaires were distributed out of 121 found to appropriate for examination. The study shown that majority of the 37(30.6 %) women between the age group of 28-37 years. 74 (61%) were aware about government health related schemes whereas 47(38%) were unaware of government schemes. 81(66.4%) don't visit library for getting information related to health whereas 38 (1.1%) visit the library.

Arun and Sangeeta Gupta (2021) research on the IL skills of University of Jammu research scholars found that IL is a basic skill for academic communities in the present information age. The distribution of 270 semi-structured questionnaires to University of Jammu research scholars resulted in the receipt of 236 questionnaires, revealing that users require training in both OPAC navigation and Boolean Operator syntax (AND, OR, NOT). The Information Literacy Programme should be more regularly conducted, with a greater emphasis on practical application, and it should be related to the demands of research scholars.

Mishra Monisha and Panda K.C (2021) conducted a study of Agriculture Universities of five states. The study revealed that 77.55% of users have perfect knowledge in operating computers. The study found that the majority of the faculty have learnt the computer skills. Students need greater instruction on how to operate computers on their own, as well as abilities related to viewing current online resources and using the web. They need to be taught information literacy so that they might be motivated to acquire the skills necessary to become self-sufficient in making use of online resources.

Okeji et al. (2020) undertook a study to evaluate the information literacy abilities of LIS (library and information science) final-year undergraduates in Nigerian universities. The findings

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of the study showed that almost half of LIS final-year undergraduates ranked their information literacy skills as moderate. On the other hand, all of the students rated their ability to organise information and integrate ideas from consulted information as high.

Kumar and Singh (2019) conducted a study of 11 universities of North India on random basis in which 150 questionnaires were distributed and only 90 duly filled questionnaires were received back and data received after study revealed that library personnel can play an important role in design and development of information literacy and poor ICT background is major impediment in imparting IL skills to students and the study further suggested to appoint appropriate staff so that proper IL skills can be imparted to the students and the well competent library and information professionals can play crucial role in providing training to students.

To investigate the level of IL among the professors at the College of Horticulture in Bangalore, Karnataka, Hemavati and Chandrashekhara (2019) undertook a study. The study used a survey methodology. The purpose of the structured questionnaire was to gather data. The majority of faculty members, according to the report, have higher knowledge and skills when it comes to using various tools, services and sources. According to the respondents, the college library should host workshops, training sessions and seminars, led by professionals to increase information literacy abilities.

Asha P and Adithya Kumari H (2018) surveyed First Grade Colleges, University of Mysore. They concluded that most researchers, faculty members search OPAC and catalogue by title. Standard number search was the least used search method. Faculty members required information for teaching class syllabus, and the study suggested conducting training programmes for improving Information Literacy skills and using an integrated learning approach, i.e. both theoretical and practical.

In 2016, Deepamala M.A. and K.S. Shivraj conducted research on the information literacy abilities of female faculty members employed by 27 engineering institutions in Coimbatore's south. Only the female professors who are employed in the south of the Coimbatore district are included in this study. Women professors from the Department of Science & Humanities at Coimbatore engineering colleges are represented in the results. The majority of faculty members (74%) favour the Internet and online knowledge sources, including social media. 54 percent of respondents said they needed information for teaching and research purposes. 70% of respondents reported having high information literacy abilities with regard to information seeking behaviours and online resources, and they use such advancements in communication and technology for their everyday problems.

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An experimental research of information skills among college students at Dhaka University was looked at by Ferdows and Ahmed (2015). The purpose of the questionnaire-based study was to ascertain the pupils' aptitudes. Statistics, PC and Web usage, and a list of commonly asked questions concerning information literacy were all part of the study. The review received responses from 199 college students in total. The findings demonstrate how inadequate the students' knowledge abilities were. Few of them were able to accurately capture even a small portion of the questions. The lack of information literacy instruction at the college, the scarcity of online information sources, and the deficient information and communication technology offices are the main causes of these discrepancies and the failure to properly write errand addresses.

Naik and Padmini (2014) studied about the Importance of information literacy in the information age History of information literacy, the process of information literacy, and the importance of information literacy are the main topics of the study, and it was found that a lack of resources is the greatest barrier to IL programmes in academic libraries. The study also came to the conclusion that the process of lifelong learning about information literacy is significantly facilitated by libraries and librarians.

Singh and Rani (2013) surveyed the information seeking behaviour of faculty of Chitkara University (Punjab) and revealed that most of the faculty members access information online, books and e-journals are the primary sources of information followed by the internet, library and information science professionals can play a significant role in helping faculty to develop information literacy abilities. In addition, the study recommended that professionals be regularly updated with emerging technology by subscribing to both print and electronic publications and providing faculty members with training in library professional orientation.

Madhusudhan, M (2012) conducted a research on information Literacy Programmes in selected universities in Delhi and discussed the information literacy methods, barriers, content and evaluation in six university libraries in Delhi. The study revealed that information literacy skills are essential for research scholars and students in their academic and research work and lack of funds, facilities manpower etc. are major barriers faced by majority of Delhi Universities. The study further suggested to have information literacy programmes a continuous process instead of once a year regular feedback system is necessary for understanding the strengths, expectations and weakness of Information Literacy Programmes and for good research work and academic curriculum or for the good of academic community and nation. The study recommended that Delhi University libraries work hard to recognise and assert their role in new technologies.

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4. NEED FOR THE STUDY

The present society is called as information society. IL is an umbrella term which encompassing concepts such as library skills, information skills, reference skills, electronic searching and information retrieval, information handling and information management. Information technology skills are also a part of information literacy. Information technology skills allow a person to use computers, software applications, the Internet, databases, and other Information and Communication Technology (ICT) tools to reach a wider range of academic, professional, and personal goals. Due to the rapid developments in the field of ICT and continuous research in various field of knowledge the information is growing at faster rate. Information is like an ocean and large value of information is available both in print and digital format. As an academician, whether it is a research scholar or a faculty member one should have the information literacy skills to cope up with the modern platforms.

The purpose of this study is to examine the IL skills of faculty and research scholars. While reviewing the published literature, it was discovered that there are very few studies being carried to study the level of Information Literacy in Sanskrit universities in India. However, research on the information literacy awareness and skills of Central Sanskrit University faculty members and research scholars is limited. As a result, there is a need to conduct study on IL awareness and skills among research scholars and faculty members to further improve the utilization of information. Keeping in view, this study is undertaken to analyze the awareness on Information Literacy skills among faculty members and research scholars of Central Sanskrit University.

5. SCOPE OF THE STUDY

The population of the study covers faculty members and research scholars of various campuses of Central Sanskrit University located in different parts of the country.

S.No	Name of the Campus	Year of Established	Place
1.	Ganganath Jha Campus	1943	Allahabad
2.	Shree Sadashiv Campus	1971	Puri
3.	Shri Ranbir Campus	1971	Jammu
4.	Guruvayoor Campus	1979	Thrissur
5.	Jaipur Campus	1983	Jaipur
6.	Lucknow Campus	1983	Lucknow
7.	Rajiv Gandhi Campus	1992	Chikmagalur

8.	Vedavyas Campus	1997	Kangra
9.	Bhopal Campus	2002	Bhopal
10.	K.J.Somaiya Sanskrit Vidyapeetha	2002	Mumbai
11.	Ekalavya Campus	2013	Agartala
12.	Shri Raghunath Kirti Campus	2016	Devprayag

6. OBJECTIVES OF THE STUDY

The objectives of the study are:

1. To determine the perception of faculty members and research scholars about their ability to know needed information and identify the sources of needed information.
2. To identify the information search skills of faculty members and research scholar for accessing print and electronic resources.
3. To study the information resources and services available in the different campuses of Central Sanskrit University.
4. To identify the problems faced by the faculty members and research scholars, while accessing and using print and electronic resources.
5. To propose a standard framework for implementing effective information literacy programmes for the Central Sanskrit University.

7. HYPOTHESES

The following hypotheses have been formulated.

1. There is no significant difference in the respondents' level of awareness about information literacy skills.
2. Faculty members and research scholars are well aware of accessing of print and electronic resources.
3. The resources and services available in the Libraries of various campus of Central Sanskrit University are adequate.
4. Faculty members and research scholars are well aware of modern information and communication technologies.

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8. RESEARCH METHODOLOGY

Methods and Material

The following methods and procedures will be used in the present study.

8.1 Respondents

The study will be confined to all the campuses of Central Sanskrit University situated in different parts of the country. The respondents include all the faculty members and research scholars of twelve campuses of Central Sanskrit University.

8.2 Sampling method

The sample size for the faculty members and research scholars will be determined on the sampling techniques outlined by Taro Yamane (1967). According to this sample size is the actual number of users which are chosen from total population for conducting the study. Sampling is done in such a way that chosen sample should represents the entire population. Sample size can be estimated by applying different methods.

Hence, the present study will cover all faculty members and research scholars of Central Sanskrit University.

8.3 Tools and techniques for data collection and analysis

Employed for Data Collection

Structured questionnaires and interview methods will be used for data collection. A well- planned and structured questionnaire will be administered for data collection in the present study. The methodology to develop the questionnaire is presented in the following section.

Questionnaires

The questions to be designed as a combination of closed and open-ended types of questions and multiple questions using the Likert scale.

The Likert technique presents a set of opinion statements. The questions will be rated on the Rensis Likert 5-point scale as:

- Most Frequently-5, Frequently-4, Less Frequently -3, Rarely-2, Do not use-1
- Regular-5, Often-4, Ocasionally-3, Rarely -2, Not at all-1

- To a great extent-5, To a moderate extent-4, To a little extent-3, Not at all-2, Cannot say- 1
- Very important-5, Important-4, Moderate-3, Not important-2, Not at allimportant-1
- Strongly agree-5, Agree-4, Uncertain-3, Disagree-2, Stronglydisagree-1
- Excellent-5, Good-4, Competent-3, Weak-2,Poor-1

Finally, two sets of structured questionnaires will be developed and the first questionnaire will be for the librarians and the second will be for the research scholars and faculty members. Reliability of the instrument will be checked on the basis of data collected by Pilot study with the help of Cronbach's Alpha test.

Interview

There is no formal interview scheduled for the study. However, informal interviews will be conducted with the select librarians, research scholars, and faculty members. Questions will be asked to elicit their views about the information literacy skills and programmes. The responses will be given by them to be noted in a dairy and used while tabulating and analyzing the data.

8.2.4 Procedure

The entire study to be done in two phases, viz., pilot study and main study.

Pilot Study

A pilot study is to be conducted at the beginning of the research to find out the feasibility of the tools employed as well as to get an idea regarding the approximate time required to analyze all the variables.

Main Study

As the first step, the investigator will obtain prior permission from the heads of the institutions to collect data from the respondents. The researcher will personally visit each respondent and request them to read each sentence carefully and select the best option. The Google Form questionnaires will also send through the-mail and reminders repeatedly sent to non-respondents.

8.2.5 Statistical Methods Applied

A number of methods will be used to analyze the data collected, which is coded and entered into a Statistical Package for Social Sciences (SPSS) version 17 like Chi-square test (to compare observed results with expected results), ANOVA test (help us to figure out to reject the null hypothesis or accept the alternate hypothesis), Regression tests (used to look for cause and effect relationships),Correlation Coefficients (used to assess the strength direction of the linear relationships between pairs of variables) and Microsoft Excel will be used to generate the necessary figures. The responses will be analyzed category- wise keeping in mind the objectives and hypotheses of the study.

9. CHAPTER PLAN (TENTATIVE)

Chapter 1: Introduction

The chapter introduces the concept of information literacy, including definitions, historical context, IL programmes in India, the importance of IL, IL models, IL standards, and information literacy.

Chapter 2: Review of Literature

The chapter includes a review of relevant literature. It briefly discusses studies on information literacy and related topics conducted both within and outside of India.

Chapter 3: Research Methodology

The chapter deals with research method. It explains research design, hypotheses, population of the study, process of collection, designing of the questionnaire, scope and limitations and data analysis.

Chapter 4: Analysis and Interpretation of Data

The chapter analyses and interprets data collected from faculty members and research scholars regarding information literacy skills.

Chapter 5: Findings, Suggestions and Conclusion

The chapter concludes with a discussion of the study's findings and recommendations. Conclusions are used to provide useful recommendations for enhancing faculty and researcher information literacy. Bibliography and Appendices are listed at the end of the thesis.

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Central University of Himachal Pradesh

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विद्या वाचस्पति

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को जमा किया गया शोध-सारांश

An ontological approach to organise the Intangible Cultural Heritage (ICH) Practices and Indigenous Knowledge of *Gaddi* community in Himachal Pradesh

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1. Introduction

Every community in the globe has its own social and cultural memories, such as rituals, practices, beliefs, traditions, and folk stories. Similarly, nearly every community in India possesses its own unique history, culture and life style that is passed down orally from generation to generation (Bala, n.d.). Culture is the way people live on a daily basis. Symbols of it can be found in places such as values, traditions, ethics, beliefs, arts, games, songs, musical compositions, and dance (Bakhshi, 2016). Culture can be divided into two types i.e. tangible (available in physical form) and intangible (Shimray & Ramaiah, 2017). And it becomes a heritage when it is carried from one generation to next: However, the cultural heritage of any community, group of indigenous people, or country is considered the identification of its people (Zhou et al., 2019). Therefore, Cultural heritage (CH) should be treated with the utmost care and has to be valued because it is presented by our ancestors.

United Nations, Educational, Scientific, Cultural Organisation (UNESCO) has played very vital role in bringing out the concept of Intangible Cultural Heritage (ICH) into spotlight through its work, "2003 Convention on the Safeguarding of Intangible Heritage". Since then, intangible cultural heritage has received significantly more attention as a research topic and as a subject for digital initiatives. (Hou et al., 2022). However this rising concerns for intangible cultural heritage on a global scale reflects worries about cultural homogeneity and a decline in cultural diversity. (Idris et al., 2016).

UNESCO in its 2003 Convention for the Safeguarding of the Intangible Cultural Heritage (ICH) defined ICH as the practises, representations, expressions, knowledge, and know-how that are passed down from one generation to the next within communities and are constantly created and changed by them based on their environment and how they interact with nature and history. And the most important part of ICH is making sure that skills and practices are passed down from one generation to the next. This inheritance is essential for keeping the traditional wealth of a minority community alive and for maintaining CH. (Dong et al., 2010). And if these traditions, practices, artifacts, skills are not transferred from one generation to another, there will be high possibilities of them getting lost one day. Shimray & Ramaiah (2017) in their study, pointed out the threat of ICH becoming distinct or fading away because of globalisation, modernization, increased employment possibilities, migration of people to urban areas, a lack of knowledge on the part of the government and the people, and a lack of support for preservation are all factors that will cause the ICH to slowly diminish and eventually disappear.

Digitization plays a significant role in the long-term preservation of the cultural memories of one's community. Over the past few decades, researchers, practitioners, galleries, libraries and museums have paid a lot of attention to digitising cultural heritage. Digitally preserving cultural heritage is a challenging and multidisciplinary task that highlights the involvement of many different fields, such as library science, history, literature, information science, computer science, and art (Pramartha et al., 2017). In this case, "digitised intangible cultural heritage" means digital resources that were made by digitising audio-visual recordings or photos. These digital resources record and keep the practises, representations, expressions, knowledge, customs, oral traditions, and skills that people in a group or community use. These digital resources can also include the instruments, cultural

spaces, tools and artefacts that are part of the intangible cultural heritage (Ertürk, 2020). When collections of intangible cultural heritage are digitized, they become more comprehensible as well as accessible to people. This can help keep some traditions alive which shows that the custom or tradition is important to the community, or even revive a practice that is no longer in use. It helps the people in the community to stay proud of their own customs and traditions. It is also good for marketing because it lets people from other parts of the world see what different types of fascinating culture and heritage are found in other areas.

And for this digitization, an ontological approach will be followed to develop the framework, where the concepts of the domain "Intangible Cultural Heritage of *Gaddi* community" will be described explicitly. Ontology primarily describes every aspect (concepts) in a domain that is understandable to both human and machine. Also, there are properties for each concept that describe its different parts and attributes, as well as restrictions on slots (Noy & McGuinness, 2001). In this study, a design of the basic ontology for cultural domain of *Gaddi* community and a digital portal will be made so that a common understanding of the structure of *Gaddi* community will be formed. It also makes it possible for the domain knowledge to be used again, so that other researchers can use this ontology and make changes to it based on their own research.

Through the development of an online digital portal, the primary objective of this study is fulfilled, which is to disseminate the rich cultural information held within the Gaddi community and to document its intangible heritage.

One tribal community-*Gaddi* in Himachal Pradesh has been chosen as the main subject of this research. Himachal Pradesh is home to a large number of different tribes. There are many different tribes in the state, such as the *kinnaure,* the *Lahuel*s, the *Spitians*, the *Pangwalas*, and the *Gujars*. And *Gaddi* is one of them. Most *Gaddis* live in the *Chmaba* and *Kangra* districts of Himachal Pradesh, though some live in other Himachal Pradesh districts and other parts of India as well. The *Gaddi* tribe is one of the oldest, self-dependent and most well-known groups in Himachal Pradesh. (Saini, 2020)

About the *Gaddi* community

The *Gaddis* are one of the most populous and well-known tribes in the state. Majority of the *Gaddi* population live in a part of the *Chamba* district called *Bharmaur*, which is also called "*Shivbhumi*", though some live in the other districts of Himachal Pradesh. They are devoted devotees of God Shiva. Their outfit is considered to be special and unique, inspired by God Shiva and Goddess Parvati's attire, which is seen to be very stunning and distinctive. Men dressed in *chola, dora,* and *topi,* while women traditionally wear *launchari, choli, dora*, *suthan*, and *ghundu*. They decorate their clothing and jewellery with pearls, mirrors, and stones. (Sood & Gupta, n.d.).

The Gaddi tribe's primary occupation is shepherding, for which they raise a large herd of goats and sheep, which they refer to as *Dhan* but some of the families also raise cows, sheep, goats, buffaloes, etc., and plough small fields, which is how they make a living. However, the *Gaddis* are not considered nomads because they have their own homes in the villages of the Chamba and Kangra districts. But they move from place to place with their

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Dhan based on the seasons. For example, in the summer they stay in the higher areas of the Chamba district, where there is enough grass for their animals, and in the winter, they move to the lower pasture lands of the Kangra district. They walk the whole distance from one place to the next. Most of the year, they don't have a roof over their heads. They walk with their *Dhan* while carrying a big load on their backs called *kharchi*, that has has their beds and other things they need.
Goats and sheep are considered as property of the Gaddi people. Their wool is used to ma ke wollen clothes and other things, and their milk and meat are consumed. During celebra tions like *Jatra, mala* they sell their goats and sheep for a good price. These are the various reasons why this community is referred as a self-dependent community from a long time (Sood & Gupta, n.d. ; Kapoor et al., 2008).

Gaddi community has a unique culture which distinguish them from others. They can be recognized because of their dialect, dress, culture, rituals, tradition and lifestyle. However, as more people move to cities and more things are built, this tribe has started to lose its identity, heritage, and authenticity and is slowly dying out. The one biggest visible example of this statement is the huge decrease in the *Dhan* practice of *Gaddis*, which is known to be the identity of *Gaddi* community. Whereas some other examples that shows how the cultural memories of this community is fading away are the change in the wedding attires of people belonging to this community, generally the traditional marriage attire of *Gaddi* people consists of *Launcha, suthnu, Patka, Sehra, Shawl* worn by groom and *Launchari, Dora, Suthnu, Ghundu, Shawl, Kurti, Chola* worn by bride but these days people who live in the lower ranges of Dhauldar don't wear the traditional attire in their marriage, the new generation of this community cannot even speak their dialect, don't believe in their devotee practices, rituals and are unaware of their Tangbile and Intangible Cultural Heritage. Even though some of the younger generation participates in these rituals and traditions, they don't really know what they mean or how important they are.

The connection between the young and old generation is weakening daily. The collective memories of the older generation are with them, but they are unable to transmit to the younger generation the significance or values of oral traditions (Bala, n.d.).

Therefore, the primary purpose of this study is to digitise the ICH of the Gaddi community in Himachal Pradesh so that the beautiful cultural memories of the Gaddi community can be preserved in a format that can raise awareness, be useful to those who may want to learn more about this community or conduct research on them, and be preserved in perpetuity for future generations.

2. Review of Literature

2.1 International

UNESCO in its 2003 Convention for the Safeguarding of the Intangible Cultural Heritage has given a definite definition on Intangible Cultural Heritage, mentioned various committees that should pay rigorous attention for the purpose of fulfilment of its objectives, provide guidance, ensure necessary funds and management regarding the safeguarding of

ICH. In addition to this, UNESCO has also explained some ways for safeguarding the ICH at national as well as international level (United Nations Educational, n.d.).

The researchers of this paper tried to figure out what factors contribute to archiving intangible heritage so that it can be used as a guide for archiving cultural heritage, especially intangible heritage, through the use of ICT. The main aim of building a standard model is to provide a starting point for studying intangibles and a guide for cultural institutions in Malaysia on how to document its intangible heritage and make it accessible to future academics and users (Amin et al., 2011).

Idris et al. (2016), in their paper, they have spoken about the issues and problems that came up when digital technology was used to preserve Intangible Cultural Heritage. Along with this, the researchers also discussed about how other people have classified heritage and cultural heritage. The researchers also described the concept of heritage cycle where they demonstrated how you can make your past a part of your future.

Pramartha et al. (2017), in their paper, the authors detailed the particulars of their research project, which aims to design and build a digital portal that will classify, arrange, and preserve all parts of Balinese cultural heritage and related knowledge. The main emphasis of their project was the Balinese traditional communication system (kulkul), which is only one part of the intangible cultural heritage of Bali. A core ontology of significant kulkul-related ideas and words and their interrelationships was also built to aid semantic searching and browsing of the online portal and associated documents.

In order to document the state of digital preservation of intangible cultural heritage in China, this study used semi-structured interviews to look at the operations of regional Intangible Cultural Assets Protection Centers in Nanyang, Kaifeng, Xianning, Chibi, Sanming, and Jingdezhen. Their analysis showed that China has a clear framework and diverse components for its digital preservation system. Although the centres have a large number of digital materials, they are poorly managed and their storage is disorganised. (Zhou et al., 2019).

The researcher explains the physical and environmental characteristics of digitised intangible cultural material in museum storage. There is also discussion of digital preservation, the history of digital preservation of museum collections, digital heritage, digitised intangible cultural heritage, and digital preservation. The study also addresses the digitization techniques used for safeguarding intangible cultural property, the major issues and difficulties associated with digital preservation in museum storage, and strategies for managing the storage of digitised intangible cultural property sustainably(Ertürk, 2020) .

This study analyses the difficulties of conserving cultural resources in rural regions and small towns, traditional rural landscapes, and rural settlement regeneration. The study justifies the need and possibility of organisational and technical strategies to preserve tangible and intangible cultural assets. The international experience of protecting cultural assets through organisational measures and digital preservation is examined, and the need to adapt it to local conditions is substantiated. Analysis of existing digital preservation techniques for cultural assets is also discussed (Goussous, 2022).

This paper discusses various ontology development tools. The publication mentions Protégé 2000, OntoEdit, OilEd, WebODE, and Ontolingua as similar ontology building

tools. Researchers also gave brief description about these tools and made a comparison among them. In conclusion, they said these tools only cover ontology design and implementation, not whole life cycle processes, and none of them offer project management, ontology maintenance, or exception handling (Singh & Anand, 2013).

In their article titled "Ontology Development 101: A Guide to Creating Your First Ontology," which was published in 2001, Noy and McGuinness provided a straightforward explanation of ontology. In their article, they explained why we construct ontology and presented the process of ontology's development, which is essentially an iterative process. And they explained all this with the help of various interesting examples.

2.2 National

Indira Gandhi National Centre for Arts has a division called media centre in their website under which some ICH of India and world are preserved in the form of DVDs documentaries. These documentaries are part of the outreach endeavours under the division media centre, and since 2002, these documentaries have been broadcast on DD-Bharati on a regular basis (Indira Gandhi National Centre for the Arts, n.d.). In addition to this, there is a section called Tribal Art and Culture under the subdivision, *Janapada Sampada* that represents the art and culture of the *Bhills* and *Gonds* tribes that are native to the states of Madhya Pradesh and Rajasthan (Indira Gandhi National Centre for the Arts, n.d.).

Another such efforts in the context of ICH have been seen in the Department of Museology in National Museum Institute (NMI). One of the many projects of Department of Museology is Documentation of Intangible Cultural Heritage. It is a pilot project that aimed to catalogue and develop Ladakh and Western Uttar Pradesh inventories. Under this project, documenting Western Uttar Pradesh and Ladakh's Intangible Cultural Heritage has been done where NMI is building ICH inventories for them. The objective of this project is to investigate the scope and nature of ICH in the Indian setting, test its formats, forms, and domains, and list the ICH aspects of these two locations as models for other studies (National Museum Institute, n.d.).

The main subject of this article was how computer techniques could be utilised to preserve the cultural history of a live tradition, like Indian classical dance. An ontological method was used to record the relationships between the many components of dance and music. This was accomplished by creating a knowledge base containing audio-visual samples of various dance styles. The researchers added conceptual metadata to a broader collection of digital artefacts in the heritage domain and provided an integrated navigational access to them with the aid of this multimedia-enhanced ontology (Malik et al., 2011).

Shimray & Ramaiah (2017) in their paper briefly describes the cultural heritage in two aspects i.e. tangible and intangible cultural heritage along with the role of libraries, archives and museums in the preservation of these cultural heritage. They also discussed various techniques or methods used for the digital preservation of the cultural heritage.

Shashi Bala (n.d.) in his paper, "Digital inventories on Cultural Memories and Intangible Cultural Heritage: A Case Study of the Yadav Community of Haryana, India," discussed how essential it is to preserve and maintain local communities' cultural memories. The Yadav community's Gowardhan Puja was used as a main case study to show why IC H needs to be digitised. He also emphasised the necessity for a national inventory system

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that assists in determining what ICH needs to be protected as ICH is a dynamic process that constantly adds and subtracts elements.

This research paper illustrates the digital preservation practises that are currently being utilised by educational institutions in Africa. Their study determined which preservation strategies were utilised by librarians, which software was being utilised by institutional repositories of African universities for digital preservation, which preservation policies were available in IRs in Africa, and whether or not there were sustainable staff and funding available to carry out digital preservation (Anyaoku et al., 2019).

This paper reviews studies on the challenges librarians, archivists, and project managers encounter in digitising cultural heritage resources. The study discovered that the lack of enough funding, no national policy on digital preservation, and lack of adequate technical infrastructure for digitising and safeguarding cultural and heritage treasures are the main causes of most digitization projects' failure (Pandey & Kumar, 2020).

2.2.1 *Gaddi* community

The researchers in their paper, "Traditional costumes and ornaments of *Gaddi* tribe of Himachal Pradesh" has provided a brief description of the Gaddi community, including their way of life, occupations, and culture. This study's primary focus was on the gaddi people's traditional attire and accessories. The researcher has identified and explained the different attire and accessories that both men and women wear during their marriage or in normal days (Sood & Gupta, n.d.).

This paper discusses about how shepherding activities affect society and the economy, how the state, farmers, and pastoralists interact with each other in a complicated way at different levels and how they are specialised and planned. Along with this, researcher deeply described the migration cycle of Gaddi community (Sharma, 2012).

Saini, (2020) briefly described every aspect of *Gaddi* community such as their customs and rituals, traditional costumes, jewellery, socio-economic status of women, disease theory of *Gaddis,* education, arts and handicrafts, tourism, occupation, survival strategies, marriages and family. In addition to this, researcher also pointed few factors that are mainly responsible for the diminishing of its heritage. As the main focus of this study is to make the reader aware of the *Gaddi* community and suggestion regarding the preservation of its heritage was also made by the researcher.

3. Statement of Problem

India is home to various communities, castes and religions. And each one of them has a unique culture, customs, and language or dialects, all of which are a part of the Intangible Cultural Heritage of those respective communities. And, it has been observed that if appropriate steps are not taken to record and preserve these elements of Intangible Cultural Heritage, they will be lost forever.

For e.g., Between the 16th and 19th centuries, the *Takri* script was used as an official script in north and north-west region of India. It was used to write the *Chambiali* and *Dogri* languages as well as other *Pahari* (Himalayan) languages such as *Gaddi, Jaunsari* and

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Kulvi. The script is related to the *Gurmukhi* and *Landa* scripts and is descended from *Sharada*, one of the *Gupta* scripts. It was frequently used in both professional and private contexts. It has a long history of coexisting with *Devanagari*. But it has increasingly been replaced by *Devanagari* since the late 19th century (International, n.d.).

Most people in Himachal Pradesh, Jammu, and Kashmir no longer see the usage of *Takri* script in present days. This is because people and the government (which plays a big role in any change) did not do enough to use this script, keep it alive, or pass it on to the next generation, and now there are only a few pieces of it left in different places. Another example can be seen in the reduction of *Dhan* practice, the tribe famous for sheep rearing is struggling to preserve its traditional livelihood because the younger generation do not want to follow this practice and another factor that is responsible in diminishing of this practice is climate change (Saini, 2020).

Similarly, if the communities located in different regions of India do not make attempts to conserve or pass on their customs, rituals, and skills to the next generation, they may lose their intangible cultural legacy permanently and will not even realise when this happened.

4. Objectives

- To explore the Intangible Cultural Heritage (rituals, crafts, music & dance) of *Gaddi* community in Himachal Pradesh.
- To examine and document the core rituals and practices of *Gaddi* community.
- Designing an ontology to build a concept map for the ICH of *Gaddi* community
- To demonstrate the use of ontology-based framework for a digital repository to organise the Intangible Culture Heritage of *Gaddi* community.

5. Hypotheses

- There is a variable distinctiveness in the Intangible Cultural Heritage practices of *Gaddi* community.
- Ontology is an effective method to conceptualize and capture the Intangible Cultural Heritage practices.
- Digital technologies are being utilized to preserve the Intangible Cultural Heritage of *Gaddi* community.

6. Methodology

The information will be collected systematically and comprehensively through primary and secondary sources.

- Primary sources: The researcher will travel to Bharmour region of Chamba district where majority of *Gaddi* people live, conduct the necessary interviews, and will do the

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live recording. In this way the primary data will be gathered through conducting in-person interviews with Gaddi people and personally visiting them to examine their culture, rituals, traditions, folk songs, and dances. With their consent, all observations and data will be documented/recorded in the form of documents, photos, or videos.
Next, based on the observations and data gathered during the visits, a framework for the digital description of the ICH of the Gaddi community will be created. For this, an ontological approach will be used for the description of the ICHs which will be uploaded as pictures, audios or videos. The framework will be created using the Protégé ontology editor, and a digital repository will be created using DSpace software.

- Secondary sources: The secondary source of data such as journal articles, books, reports will also be consulted for the purpose of this study.

7. Scope

This study focuses solely on the Intangible Cultural Heritages of the *Gaddi* tribal community situated in Bharmour region of Himachal Pradesh. However, this study will provide opportunities for other researchers and those who wish to conserve the ICHs of various other communities, which is disappearing with each passing day.

8. Limitation

This study designed a framework for digitizing the ICHs of one tribal community-*Gaddi* of India situated in Bharmour region of Chamba district of Himachal Pradesh. Other researchers can do additional studies on this idea using the foundation provided by this study.

9. TENTATIVE CHAPTERIZATION

Chapter 1: Introduction

In this chapter, the background and purpose of the study will be established, as well as define the importance of preserving ICH of communities, specifically tribal communities. In addition to this, need and importance of preserving ICH of communities, indigenous people and what factors/methods contribute in the preservation of ICH will also be discussed.

Chapter 2: Review of Literature

In this chapter, review of previous research and literature that is relevant to the study will be written. The review will include description, summary and analysis of the relevant literature of the previously conducted research. It will give a theoretical framework and context for the current study in reference to the previous research that has been done.

Chapter 3: Objectives, Hypothesis, Methodology, Scope and Limitation

In this chapter, objectives, hypothesis of the study as well as scope and limitations will be discussed. Methodology followed during this research study will also be described.

Chapter 4: International, National and Regional level contribution/support of various organisations/communities/Individual in the preservation of ICH.

Various efforts, contributions done by various organisations, communities and individuals in the support of ICH preservation and safeguarding will be discussed.

Chapter 5: *Gaddi* community and its Intangible Cultural Heritage

Gaddi community of Himachal Pradesh will be discussed in depth along with its Intangible Cultural Heritage (ICH) and the semi-nomadic lifestyle of *Gaddi* community. In addition to this, why digital preservation of ICH of this tribal community is important will be described.

Chapter 6: Creating a framework for digital description of ICH of *Gaddi* community

In this chapter, an ontology-based framework for digital repository will be designed to digitally describe the ICH of *Gaddi* community.

Chapter 7: Findings and Conclusion

Findings of the study as well as the conclusion will be discussed in this chapter. In the end some suggestions would also be mentioned on how can be safeguard our ICH.

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Appendix 1: Indigenous terms used in synopsis and their meanings.

S.No.	Indigenous Terms	Meaning
1.	*Chambiali*	It is a Pahari language of northern India spoken by people of Chamba region.
2.	*Chola*	It is the name of the traditional attire (gown) worn by Gaddi men as an upper garment, which is often composed of soft and thin 'patti' of white colour.
3.	*Dhan*	The flock of 200- 300 goats/sheep.
4.	*Dogri*	It is a language that is spoken in the Jammu region of J&K.
5.	*Dora*	It is a black coloured rope that is made up of wool. Women and men wear it around the waist over *Launchari* and *Chola* respectively.
6.	*Gaddi*	It is the term used for the entire native population of the Bharmaur region of Chamba district. These people speak *Gaddi* dialect.
7.	*Ghundu*	It is a long scarf (Duppatta) worn by women.
8.	*Jatra*	It is performed for *Gaddi* deities. The meaning of *Jatra* is journey, it is the journey of these people from their homes to temples (situated in mountains) of their deity. This practice is followed when one's wish believed to be granted by their deity. This does not involve night stay.
9.	*Jaunsari*	It is a Pahari language spoken in the Chakrata and Kalsi blocks of the Dehradun district in Uttarakhand's Garhwal region.

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10.	*Kharchi*	*Gaddi* people who follow *Dhan* practice, carry a big load on their back that has their beds and other things they need. They carry this load when they are moving from one place to another with their *Dhan.*
11.	*Kulvi*	It is a Pahari language of northern India that is spoken in Kullu region.
12.	*Kurti*	It is worn under the *Launchari* by bride. It is made of cotton.
13.	*Launcha*	It is one of the traditional marriage dresses which is worn by groom.
14.	*Launchari*	It is the traditional marriage dress worn by bride. It is like a long gown with flair with its front open. The lady puts one side of gown over other and then wears the Dhora around her waist over the gown.
15.	*Nuala*	It is specifically performed for Lord Shiva as an act of thanksgiving. *Nuala* goes all night where people dance sing and give their praying to God Shiva. In both *Jatra* and *Nuala* goat/sheep is sacrificed to the deities and its meat is served to people as *parsad.*
16.	*Sehra*	It is one of the marriage attires worn by groom. They wear it on their head throughout the marriage ceremony.
17.	*Shawl*	It is a wollen long cloth that is wrapped around the shoulders to keep the upper body warm. Both men and women wear it in winters.
18.	*Suthni*	It is the local name for traditional woollen churidar pyjamas worn by women.
19.	*Suthnu*	It is the local name for men's traditional woollen churidar pyjamas, which are warm pants.

Appendix 2: Various script names used in synopsis and their meanings

Script name	Meaning
Gurumukhi script	*Gurmukhi* is the script that Punjabi Sikhs use to write their language. It is often considered as Sikh script. In Punjab, India, *Gurmukhi* is the official script for the *Punjabi* language.
Landa script	In the tenth century, the script known as Landa evolved from the *sharda* script. It was mostly used in the northern and northwest Indian states of Punjab, Sindh, Kashmir, and some regions of Balochistan.
Takri script	The *Takri* alphabet, also known as *Chambiali* in Chamba region and Dogri in Jammu region, was created during the Devasesa stage of the Sharada script between the 14th and 18th centuries. Many Central Pahari languages of the Western Himalaya, including Gaddi or Gaddki, Kishtwari, and Chambiali, have historically been written in Takri.
Gupta script	The *Gupta* Empire of the Indian subcontinent, which was a time of significant religious and scientific advancements, is

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	associated with the *Gupta* script, also known as *Gupta* Brahmi script or Late Brahmi script, which was used to write Sanskrit.
Sharda script	The *Sarada*, or *Sharada* script is a member of the Brahmic family of scripts and is an abugida writing system. The script was widely used to write Sanskrit and Kashmiri between the eighth and twelfth centuries.
Devanagari script	With over 120 languages using it, the *Devanagari* script is the fourth most extensively used writing system in the world. It has 47 main letters, including 14 vowels and 33 consonants.

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Annexure-X

हिमाचल प्रदेश केंद्रीय विश्वविद्यालय

Central University of Himachal Pradesh

[Established under the Central Universities Act 2009]

विद्या वाचस्पति

उपाधि की आंशिक पूर्ति में

हिमाचल प्रदेश केंद्रीय विश्वविद्यालय

को जमा किया गया शोध-सारांश

USE AND IMPACT OF OPEN EDUCATIONAL RESOURCES: A COMPARATIVE STUDY OF SELECT HIGHER EDUCATION INSTITUTIONS OF HIMACHAL PRADESH

A synopsis

Submitted to the Central University of Himachal Pradesh

in Partial Fulfilment of the Degree of

DOCTOR OF PHILOSOPHY

स्कूल / In the School of Mathematics, Computer & Information Science

विभाग / In the Department of Library and Information Science

पर्यवेक्षक / Under the Supervision of Dr. Dimple Patel by

Poonam Chandel

पंजीकरण / Registration No.: CUHP21RDLIS01

माह एवं वर्ष / Month & Year : December, 2022

हिमाचल प्रदेश केंद्रीय विश्वविद्यालय

धर्मशाला, हिमाचलप्रदेश भारत

CENTRAL UNIVERSITY OF HIMACHAL PRADESH

DHARAMSHALA, HIMACHAL PRADESH, INDIA

RDC Approved

on 29/12/2022

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1. Introduction

1.1. What are Open Educational Resources?

Rising demand of information has been witnessed in every sector nowadays. Information and Communication Technology (ICT) is playing a crucial role in supplying right information to the right person at the right time. The two major pillars of ICT are computer and latest technology. Everybody wants to be information oriented in the modern period, and this has had a significant impact on the educational field as well. (Mushtaq, Ali & Bhat, 2017). For fulfilling this information need of everyone Open educational resources (OER) has emerged as a potential effective solution as it provides open and free educational material to everyone. Open educational resources can make higher education more accessible to students who cannot afford it and can also help students who are in danger of quitting school due to financial difficulties by easing their financial responsibilities. By modifying and enhancing the open content itself, instructors can have the academic freedom they need to modify their courses to better meet the needs of their students. This can even help students engage in more fulfilling learning experiences.

The term "open educational resources," or OER for short, was first used by UNESCO in 2002 to refer to "any type of educational materials that are in the public domain or introduced with an open licence." These materials can include "textbooks to curricula, syllabi, lecture notes, assignments, tests, projects, audio, video, and animation." Basically, it consists of any tool or technique used to support free and open access to knowledge and education, including course materials, modules, textbooks, videos, software, and so forth. Additionally, it is employed for educational and research purposes. It includes materials that are in the public domain or that have been made available under a creative commons licence, allowing others to use them without restriction. OER is an effective idea that asserts that everyone should have free access to the world's knowledge because it is a public good. OER refers to any offline content that is made available under open access, such as printed textbooks, and does not just refer to online resources.

1.2. OER Recommendation by UNESCO

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At the 40th UNESCO General Conference which was held in Paris on 25 November 2019, the United Nations Educational, Scientific and Cultural Organization (UNESCO) adopted four key areas related to the Recommendation on Open Educational Resources (OER). The four key areas clearly states the following:

- Capacity building: enhancing the ability of all significant stakeholders in the field of education to produce, obtain, utilize, repurpose, adapt, and distribute OER as well as to use and implement open licences in a way that complies with national copyright laws and international obligations.
- Developing supportive policy: In order to ensure that all students have access to high-quality, inclusive education and lifelong learning, it is imperative that policymakers, educational authorities, and academic institutions adopt regulatory frameworks to support open licensing of publicly funded educational and research materials.
- Effective, inclusive and equitable access to quality OER: such strategies and programmes should be adopted with appropriate technology that ensures sharing of OER in any format and is also providing equitable access, collaboration, curation and easily searchable, also including vulnerable groups and persons with disabilities.
- Nurturing the creation of sustainability models for OER: fostering and promoting the development of sustainable OER models at the regional, institutional, and national level, as well as the development and pilot testing of new OER-based models of education and learning that are themselves sustainable.
- Fostering and facilitating international cooperation: the promotion of international cooperation between relevant parties in order to reduce duplication of effort in the creation of open educational resources (OER) and to create a global resource of OER that is representative of a wide range of cultures, is locally relevant, is sensitive to issues of gender and accessibility, and is available in a wide range of languages and formats.

1.3. Definitions of OER

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According to the definition of UNESCO, Open Educational Resources are "teaching, learning and research materials in any medium – digital or otherwise – that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions." (UNESCO, 2002)

UNESCO updated its definition of OER in 2012 to include more factors. "OER are teaching, learning and research materials in any medium, digital or otherwise, that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions. Open licensing is built within the existing framework of intellectual property rights as defined by relevant international conventions." (UNESCO, 2012)

William and Flora Hewlett Foundation states "OER are the teaching, learning and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use and re-purposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge". (William and Flora Hewlett Foundation, 2015)

1.4. 5 R's of OER

Retain – The first R stands for retain which gives the right to create, own, and use derivative works of the OER.

Reuse – Second R stands for reuse which gives the permission to use the information in a number of contexts, such as in a classroom or a study group and in many other different ways.

Revise – Third R stands for revise which means the ability to modify or change the material like translating the content into another language.

Remix – Fourth R stands for remix the permission to combine the original or altered content with other elements to create something new.

Redistribute – Fifth R stands for redistribute the right to share copies of the original material, your edits, or your remixes with others.

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1.5. Open Licenses

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CC0 : CC Zero

It is also known as CC Zero. It is a tool dedicated to the public that lets creators give up their copyright and put their works in the public domain all over the world. With CC0, people can share, remix, adapt, and build on the material in any way they want and in any format without having any restrictions.

1.6. Role of library in implementing OER

Libraries now offer more than just books. They also offer information in many different ways. In the digital age, they offer a number of services and providing links to open educational materials is one of them. The management of educational resources in any format and provision of correct information to library users are areas of expertise for libraries. Library professionals are well-versed in copyright laws and publishing houses and they can be actively involved in spreading awareness about open educational resources. Librarians can play a very important role in helping and assisting teachers and students use OER. The knowledge of the librarian can be put to use for understanding open publishing, copyright protection, and fair use.

2. Statement of the problem

In today's modern world Information and Communications technology has not left any sector untouched and so is the case with higher education. Students, researchers and faculty members now demand affordable, high-quality education. The rising costs of higher education, from tuition fee to the prescribed information resources, are another issue that affects students. In the latter case, OERs have emerged as a new supplement method to traditional learning and teaching methods. Delivering education through open educational resources has become the new method of teaching as it can be accessed universally and round the clock.

Present study entitled as **"Use and impact of Open Educational Resources: A comparative study of select Higher Education Institutions of Himachal Pradesh"** examines the use of OER and its impact on students, faculties and librarians of four different types of Higher Education Institutions of Himachal Pradesh.

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The study will also attempt to explore the role played by libraries in managing, promoting and providing access to OER. The study will further investigate faculty perception on OER and explore whether the selected Higher Education Institutions have adopted any OER policy for content building.

3. Review of Literature

1. The study named 'Ranking OER Providers in India: A Webometric Analysis' ranks OER providers in India according to their web impact factor (WIF). When providing a ranking, websites and backlinks were also taken into account. After outlining the significance of OER, the author provided information on eight Indian OER initiatives before ranking them according to web impact factor, with Sakshat coming in first and National Council for Educational Research and Training coming in second, according to paid search engines. In order to avoid any biases, the author also employed an academic web crawler, which placed Sakhat and the National Institute of Open Schooling in first and second place, respectively. The paper comes to the conclusion that by utilising OER, everyone can benefit from their fundamental right to an education, and teachers may also improve their teaching methods. (Saha & Mukhopadhyay, 2016)
2. In 'Contribution of Library Professionals and Libraries in Open Educational Resources in Indian Scenario', Sunil Upneja reported that Open Educational Resources are contents that are freely accessible and can be used for online teaching and learning and users can retain, reuse, revise, remix or redistribute the content. OERs are created for teaching-learning, while Open Access is generally free research publications. OER differs from Open Access (OA) resources. Total 187 respondents were included in the study. Some of the authors' findings support what was already known. "Institutions must be educated about OER's significance in teaching and learning." Upneja reported 54% of libraries had no open access subscription policy. The study does not give generalizable results, but it can potentially guide future OER research and discussion. Given their pervasive scope and specialised expertise, libraries and librarians are positioned to encourage OER adoption. Open educational materials can benefit from librarians' expertise of free online publishing and copyright. (Upneja, 2020)

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3. 'TESS-India OER: Collaborative practices to improve teacher education' outlines a creative solution to the difficulties faced by teachers in India and also presents a toolkit of resources for teacher education in several Indian states. The development and adaption of the Open Educational Resources involved more than 200 Indian and foreign specialists, policymakers, and teachers. The OER are being used extensively by Indian teacher educators in both their pre-service and in-service teacher education programmes. TESS-India Collaborative methods to enhance teacher preparation through multilingual India's Open Educational Resources (OER) toolset. It supports the practice-based learning of primary and secondary teachers of literacy, math, English, and science. The first pilot iteration of the TESS India MOOC was presented in 2015 in English and drew over 3000 participants from around the world and 200 teacher educators supported by TESS-India state partners. Face-to-face online study was offered and over 80% of this group completed the MOOC. (Wolfenden, 2015)
4. Embracing OER at institutional level is the focus point of study titled "An Assessment of Individual and Institutional Readiness to Embrace Open Educational Resources in India". What form should OER take in India and what parameters should be adopted to measure the reach of OER are some of the questions that are addressed in the present study. The "4Rs" of open educational resources (OER)—reuse, revise, remix, and redistribute—may not be a problem for academics, but to be easily carried forward depends on how much redistribution happens. With more than ten million students, India's higher education system is one of the biggest in the world. In the last ten years, the government has increased the use of ICT in teaching and learning. Only 2-5% of the respondents tried to answer questions about the policy, legal, and technological issues that followed OER. The wide use of information and communication technologies and open source technologies in India makes learning through open educational resources possible. Along with the slogan "education for all," the goal of the National Policy on Education was to improve the quality of education and make it easier for more people to get an education. (Harishankar, Balaji & Ganapuram, 2013).
5. OER global trends and its future are discussed in study titled "Global Trends in OER: What is the Future?". Learning is important to sustainable growth, says Commonwealth of Learning. Economic progress, social inclusion, and environmental conservation must

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result from learning. OER can reduce textbook costs by providing affordable resources. Asian tertiary education is expensive relative to typical income. The five issues are enabling legislation, ensuring inclusion and equity so no one is left behind, increasing capacity in the usage and re-use of OER, removing linguistic barriers and taking cultural factors into account, and generating sustainable business models. In spite of Asia lacking national OER policies, it has still established some effective OER projects like OER Asia, China Open Resources in Education, India's National Repository on OER, and Pakistan's and Japan's Open Courseware projects all support open content to benefit education . According to a Nepali research OER in local language is very crucial for promoting OER. Quality, sustainability and technological barriers are some of topics studied in the same study. According to a global survey, students choose OER mostly for cost savings. Access to computers and connectivity, institutional permissions, awareness of OER, competence to generate and use OER, and appropriate content are external variable affecting OER use. Development of OER for differently abled people should also be considered. (Kanwar & Mishra, 2018).

6. The study titled "OER and Teacher Educators: Awareness and Barriers" studied teacher educators' OER awareness. After describing the concept to few co-workers and finding them unaware of the topic prompted the researcher to evaluate teacher educators' awareness of open educational resources. The current research was taken up in 2013 when the researcher submitted a paper on OER to the institute's academic head and the r esults demonstrated uncertainty about OER and its features. Referring to another study the researcher points out that OERs can swiftly proliferate if the last two Rs, revise and remix, are legalised by a simple licence. The researcher reported that 65% of participants used EGyankosh, followed by You Tube School/You Tube Education and INFILIBNET (42.5%). The survey found that teacher are unaware of OER but look for teaching resources, download e-Textbooks, and read open access journals, all of which are OERs. OERs experience the most difficulty in locating and using them. Also 65% of the respondents reports lack of Technological infrastructure, 5705% reports time constraints as key factors affecting the use of OER. (Bansal & Joshi, 2015).
7. The present study titled "Utilization of Open Educational Resources (OERs) among College Students Affiliated to Alagappa University in India" investigates the use of OER

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in Alagappa University students during a pandemic like COVID-19 (2021) in which a total of 121 students participated. This investigation includes 66 women and 55 men and 83.5% of pupils know internet materials are free, 82.6% of pupils receive online learning materials and 68.6% support direct online learning. These characteristics helped identify student OER barriers. Sharing and improving information has modernised the planet. Open education resources are teaching, learning, and research materials in the public domain or provided under an open licence. COVID-19 has revolutionised the global workplace. This chance allows students interact with ICT to get their academic needs online. Students are eager to accept OER, however content-related, Internet-related, and environmental variables reduces OER usage.This helps pupils benefit from the COVID-19 epidemic. Students can benefit from OER if the organization conducts orientation programme and guides students on OER usage. (Nagaiah & Thanuskodi, 2021).

8. A case study of e-PG Pathshala by Panda seeks to determine the overall number of e-PG Pathshala visits in multiple ways in which 70 people were studied. It shows the usage of e-PG Pathshala in India's most visited cities, such as metro cities, smart cities, and state capitals where the number of e-PG Pathshala visits is larger than the rest due to learning, awareness, financial wealth, and lifestyle. e-PG Pathshala contains around 70 subject groups classified into STEM (science, technology, engineering and math) and AHSS (Arts, Humanities and Social Sciences). Delhi and New Delhi have 11% of e-PG visits, Kolkata 9% visits, Mumbai and Pune having 7.5% visits in the same situation. The study reports that e-PG Pathshala is ideal for PG and higher-level Library Science students due to its awareness and quality courses. The researcher reports that Home Science, Sanskrit (M.A.), and Hotel Management have the most uploaded modules (640, 640, and 639 respectively), whereas Library Science, Chemistry, and English have the most e-PG visits (i.e. 395, 565 and 560 respectively). (Panda, 2020).
9. "Content Analysis of OER: A Literature Review" by Elango and Kumaravel discusses 23 pushlished studies on OER. Open educational resources (OER) are digital materials that can be re-used for teaching, learning, research and more, made available free through open licenses, which allow uses of the materials that would not be permitted under copyright alone. The researcher suggests the Open Educational Resources to help ease the sting of the high cost of textbooks. Content analysis research technique employs a series of steps

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to get reliable conclusions from text. Results may differ depending on the sources used, including newspaper articles, workshops, dissertations, and offline sources as these are important fields and it must be included in future studies for further research progression. (Elango & Kumaravel, 2022).

10. Awareness and usage of open educational resources in central universities of north india is reported in the study titled "Users' Awareness and Usage of Open Educational Resources in Central Universities of North India". The current study is based on analysis of data collected with the help of a structured and tested questionnaire using survey method. The findings of the present study can be useful for libraries and OER service providers in understanding the requirements and expectations of academic communities regarding OERs. Maximum users have awareness about open educational resources and they have a favourable attitude towards OERs. According to the findings, there were no appreciable differences in OER usage according to subject specialisation. This demonstrates that the academic community is interested in using OERs and is aware of their advantages. (Midha, & Kumar, 2022).
11. The study titled "Emergence of open educational resources (OER) in India and its impact on lifelong learning" discusses Open educational resources (OER) and open courseware (OCW) as two new ideas that can help make sure everyone has the same chance to get a good education. Indian institutions have seen how important and useful OER can be in helping to close the learning gap in the country. Most programmes in India for higher education and professional education are taught in English. Indian policymakers know that their country's economy won't reach its full potential until they take care of and grow their human capital through quality education for all. In a knowledge society, a key way to build human capital is through lifelong learning. (Das, 2011).
12. The study titled "Digital Repository to Open Educational Resource Repository: IGNOU's eGyanKosh" by Kanjilal discusses an OER named eGyanKosh. Creating eGyanKosh, a digital library of learning resources, and making its contents available as open access material was a step in the right direction. Adopting an open educational resources (OER) policy will give the university more momentum to become a leader in the ODL system. Under the OER policy, the university plans to support free and open access to all educational resources and make them freely available from the OER repository. All of the

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content it owns will have a Creative Commons Attribution licence. It has been planned to make eGyanKosh a national digital repository by including consortium-based learning resources from other open universities and distance education institutes in the country. The paper also discusses National Knowledge Commission's suggestion of develop open and distance education and OER to reach its goals of expanding higher education, making it better, and including more people. (Kanjilal, 2013).

13. In order to benefit students at all levels, the present study "Open Educational Resources: Indian Initiatives" introduces the idea of Open Educational Resources (OER) and emphasises numerous government initiatives to promote open access to educational resources in India such as NPTEL, Sakshat, CEC, e-PG Pathshala, etc. OERs have been growing slowly in India, where a number of national institutions have set up OER portals so that their educational resources can be used all over the country. Institutions with better ICT infrastructure will use open resources more than those without the right infrastructure. (Mushtaq, Ali & Bhat, 2017).

4. Significance of the study

For students who are already struggling to pay rising tuition fee and housing costs, the cost of textbooks can make it harder for them to access higher education. Students can save money on textbooks in the short term by buying or borrowing books, using rental programmes, using e-books and depending on library. But none of these options are as dependable as OER. Open educational resources can lower the cost of education because they are free of cost and can be reused again and again as allowed by their license unlike e-books or other course material that requires subscription which expires after sometime.

The current study will try to investigate the perceptions of students, faculty members and librarians regarding OER. It focuses on use of OER in four different type of Higher Education Institutions of Himachal Pradesh. Awareness and use of OER among students and faculties of different type of institutions may differ accordingly. Same is true for different levels of students.

5. Scope of the study

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All the under graduate students, post graduate students, research scholars, faculty members and librarian from all four Higher Education Institutions will be included in the population of the study.

The research will be carried out in the following four Higher Education Institutions of Himachal Pradesh:

- **Central University of Himachal Pradesh, Kangra**

  The only central university in the state of Himachal Pradesh is CUHP, which was founded in 2009. Students from all academic fields, including the humanities, social sciences, and science, are admitted here. It is the only central university in the state of Himachal Pradesh which is why it was selected for the present study.

- **Himachal Pradesh University, Shimla**

  Established in 1970, it was Himachal Pradesh's first and oldest state university. It was the only higher education institution in the state to provide interdisciplinary programmes (until 2022, with the coming of Sardar Patel University, Mandi) which is why it was selected by the researcher for the present study.

- **Indian Institute of Technology, Mandi**

  It is a technical and research university that offers programmes in all academic disciplines, including science, social science, management and humanities. It was founded in 2009 in the Himachal Pradesh district of Mandi. It was ranked 39th by NIRF in 2022 under research institution category. It is the first research university to be listed in NIRF ranking in the state of Himachal Pradesh and thus it was selected by the researcher for the current study.

- **Shoolini University, Solan**

  It is a private research-based university that was founded in 2009 and is located in district Solan, Himachal Pradesh offering programmes in biotechnology and management sciences. It was ranked 96 by NIRF in 2022 under university category. It is the first private university to be listed in NIRF ranking in the state of Himachal Pradesh and thus it was selected by the researcher for the current study.

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S.No.	Higher education institution	Institution Type	Year of Establishment	Courses Offered	District
1	Himachal Pradesh University	State University	1970	science, social science, management, humanities	Shimla
2	Central University of Himachal Pradesh	Central University	2009	science, social science, management, humanities	Kangra
3	Indian Institute of Technology	Research University	2009	science, social science, management, humanities	Mandi
4	Shoolini University	Private University	2009	Biotechnology, management sciences	Solan

6. Objectives

1. To compare the status of OERs and OER policy in selected higher education institutions of Himachal Pradesh.
2. To find out awareness and use of OERs amongst UG and PG students, research scholars and faculty members.
3. To study the most preferred OERs amongst students and research scholars of the institutions.
4. To study the role of library in managing, promoting and providing access to OERs in selected institutions.
5. To develop an OER information literacy framework.

7. Hypotheses

Following are the hypotheses for the present study:

i) OERs address the challenge of high cost of study materials in higher education.

ii) The overall use of OERs changes with the type of institution.

iii) There is a correlation between users' qualifications and level of using OERs.

8. Research Methodology

A research methodology lays out the steps that will be taken to gather, analyse, and present data in a way that will yield useful results for the study. It is the most important part of any study because it explains how the researcher conducted the study. It explains the study's methodology, letting the reader evaluate the study's findings for themselves.

Data will be collected from students, faculties and librarians of the four selected institutions of Himachal Pradesh.

8.1. Sample Population

Population of the study will consist of under graduate, post graduate, research scholars, faculty members and librarians of the selected higher education institutions of Himachal Pradesh.

8.2. Data collection tools: The current study is based on survey methodology where data is gathered using a structured online questionnaire prepared through google forms having open ended and close ended questions. The online questionnaire will be shared through email to the students, faculty members and librarians. Following questions will be covered in the questionnaire:

- Awareness of open educational resources.
- Use and acceptance of open educational resources.
- Adoption of OER policy at university level.
- Library professionals involvement in spreading OER awareness.
- Faculty attitude towards teaching and learning through OER.

8.3. Data Analysis: Statistical methods such as SPSS will be used to analyses the primary data collected through a questionnaire. The study's goals and hypotheses will guide the categorical analysis of the responses. The required figures will be produced using Microsoft Excel.

Bhandel

9. Tentative Chapterization

Chapter one: Introduction

Chapter first describes OER, definitions of OER, 5 R's of OER, open licenses, significance of the current study, role played by libraries in implementing OER, objectives of the study, hypothesis, statement of the problem and scope and limitations of the present study.

Chapter two: Major OER initiatives in India and globally

Second chapter discuss some of the major OER initiatives in India and around the world.

Chapter three: Literature Review

Chapter three is an exhaustive collection of the research and literature that is currently available on open educational resources. It discusses the significant research that has been done on OER in India and around the world. The literature review will be categorized as national and international studies related to students, faculties and librarians.

Chapter four: Research Methodology

This chapter describes the research methods that were taken to complete the research problem.

Chapter five: Data Analysis and Interpretation

This chapter analyzes the data collected from the selected universities and further interpretation is arranged and presented in a methodical order using graphs, pi charts, and tables.

Chapter six: Findings Conclusion and Suggestion

Major findings will be evaluated in this chapter and also suggestions will be provided to improve the current status of OER. Useful suggestions will be made for improving OER status in light of the findings.

Bhandel

References

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Website/Webpage

The Apache Software Foundation. (n.d.). Apache License, Version 2.0. https://www.apache.org/licenses/LICENSE-2.0

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Head of the Department
Dept. of Library & Information Science
Central University of Himachal Pradesh

21 Dec 2022

Subject: - Appointment of Examiners and Evaluation of thesis – reg. Ordinance 42 (Clause 14.1)

Madam,

With reference to the above cited subject, I am proposing the following panel of external examiners for the evaluation of thesis of Mr. Vimlesh Patel, Research Scholar (Roll No. CUHP17RDLIS01).

I kindly request you to place the panel of examiners before the RDC for its recommendation.

Sl No	Name	Address
1	Prof. Nirmal Kumar Swain	Professor, Dept. of Library and Information Science, M D University, Rohtak, Haryana, Email: drnkswain@gmail.com Mobile: 9416516771
2	Prof. S.Srinivasa Ragavan	Professor & Head Dept. of Library and Information Science, Bharathidasan University, Tiruchirappalli- 620 024., India Email: maduraiseenoo@yahoo.co.in Mobile: 6382992198 / 9486916358
3	Prof. Shilpi Verma	Professor, Dept. of Library and Information Science, Babasaheb Bhimrao Ambedkar University, (A Central University) Vidya Vihar, Raebareli Road, Lucknow – 226025 Email: shipoo_lko@rediffmail.com Mobile: 8004000567
4	Prof. R Sevukan	Professor, Dept. of Library and Information Science, Pondicherry University, R Venkat Raman Nagar, Kalapet, Pondicherry - 605 014, India Email: rsevukan.lis@pondiuni.edu.in / sevukan2002@yahoo.com Mobile: 9094082417
5	Prof. Yougal Joshi	Professor & Head Dept. of Library and Information Science, Kumaun University, Nainital Email: ycjoshiku@gmail.com Mobile: 7982948730

6	Prof. Umesh Chandra Sharma	Professor, Dept. of Library and Information Science, Dr. Bhimrao Ambedkar University, Paliwal Park, Agra (U.P.) 282004 Email: drscumesh51@gmail.com Mobile: 9997485767
7	Prof. M P Satija	UGC Emeritus Fellow & Former Professor, Guru Nanak Dev University Amritsar-143005, India Email: satija_mp@yahoo.com Mobile: 9877486160 & 9463169696
8	Dr. Satish Kumar Malik	University Library M D University, Rohtak, Haryana Email: librarian@mdurohtak.ac.in Mobile: 9416516231
9	Prof. Ch. Ibohal Singh	Professor & Head, Department of Library & Information. Science Manipur University Canchipur - 795003, Imphal, India Email: ibohal68@gmail.com Mobile: 9436033910
10	Prof. Moses M. Naga	Professor, Dept. of Library and Information Science North Eastern Hill University Umshing Mawkynroh Shillong 793022 Email: mosesmnaga@gmail.com Mobile: 9615037789

Thanking you
Yours sincerely,

21/12/2022

(Dr. Shivarama Rao K, Associate Professor)
Dept. of Library & Information Science, CUHP Shahpur Parisar

Annexure-XII

पत्रांक संख्या० सीओई/2-2/हिप्रकेवि/2021/1171
हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय
Central University of Himachal Pradesh
परीक्षा नियंत्रक कार्यालय/ Office of the Controller of Examination

धर्मशाला – 176215 20 जुलाई, 2021

सेवा में

विभागाध्यक्ष
पुस्तकालय एवं सूचना विज्ञान विभाग,
हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय
अस्थाई शैक्षणिक खण्ड, शाहपुर,
जिला काँगड़ा, हिमाचल प्रदेश- 176206 |

विषयः श्रीमती नवनीत कौर, CUHP18RDLIS01, शोधार्थी, पुस्तकालय एवं सूचना विज्ञान विभाग के कोर्स वर्क के सम्बन्ध में |

महोदया,

क. कृप्या उपरोक्त विषय के सम्बन्ध में अधोहस्ताक्षरी के कार्यालय से प्रेषित पत्र संख्या० सीओई/1-1/हिप्रकेवि/18/11629-30 दिनांक 22.06.2021 तथा प्रत्युत्तर में आपके विभाग से प्राप्त पत्र संख्या LIS/1-2/CUHP/20/28 दिनांक 30.06.2021 का सन्दर्भ ग्रहण करें |

ख. श्रीमती नवनीत कौर, CUHP18RDLIS01, शोधार्थी, पुस्तकालय एवं सूचना विज्ञान विभाग के कोर्स वर्क के सम्बन्ध में माननीय कुलपति महोदय द्वारा निम्नलिखित निर्देश प्रदान किये हैं:

i) Course Code LIS-401 answer book should be gotten evaluated from the Dept. at the earliest |
ii) Internal Assessment of LIS-401 & LIS-509 should be submitted by the Dept. at the earliest |

इस सम्बन्ध में आपसे अनुरोध है कि माननीय कुलपति महोदय के निर्देशानुसार कार्यवाही अमल में लायें |

परीक्षा नियंत्रक

प्रतिः
1. कुलपति के निजी सचिव, माननीय कुलपति महोदय के सूचनार्थ |

परीक्षा नियंत्रक 20/7/21

हिमाचल प्रदेश केंद्रीय विश्वविद्यालय

Central University of Himachal Pradesh

(Established under Central Universities Act 2009)

अस्थाई शैक्षणिक खण्ड, शाहपुर, ज़िला काँगड़ा, हिमाचल प्रदेश - 176206

Temporary Academic Block, Shahpur, Distt. Kangra (HP) - 176206

Website: www.cuhimachal.ac.in

File No. LIS/1-2/RD/CUHP/18/*55-57*

Dated: *23.07.2021*

CIRCULAR

The following **Committee** is **constituted** to look into the matter of **Evaluation** of the **Answer Sheet** of **End Term Examination** and **Internal Assessment** as per **CUHP rules** for the **Course Code: LIS-401** of the **Course Work** of **Ms. Navneet Kaur, CUHP19RDLIS01**, Ph.D. Scholar in the **Department of Library and Information Science**, School of Mathematics, Computers and Information Sciences.

1. **Dr. Shivarama Rao K.**, Assosicate Professor, Department of Library and Information Science.
2. **Dr. Pawan Kumar Saini**, Assistant Professor, Department of Library and Information Science.

The **committee** will **submit** their **final report** within **01 week** from the **date** of the **issuance** of this **circular**.

Dr. Dimple Patel,
Head,
Department of Library and Information Science

Copy to:

1. Individual Concerned.

Central University of Himachal Pradesh
(Established under Central Universities Act 2009)
PO BOX: 21, DHARAMSHALA, DISTRICT KANGRA - 176215, HIMACHAL PRADESH
Website: www.cuhimachal.ac.in

File No

Dated: 30/07/2021

To

The Controller of Examination
Central University of Himachal Pradesh
PO Box 21 Dharamshala
Kangra-176215, HP

(Through proper channel)

Subject: ***Submission of Award list and Answer sheets (LIS 401 Ph. D. Course work)***

Sir

With the reference letter no. file no. COE/2-2CUHP2021/11744-45. Please find enclosed End Term Examination 2019 Results and awards. The documents following enclosed:

1. Award List of End Term Examination 2019
2. Award Lists of Internal Assessment LIS 401 & LIS 509
3. Attendance sheet, and Question paper LIS 401
4. Answer sheet of End Term Examination 2019 -One

Thanking you

Yours sincerely

30/7/21 30/7/2021

Central University of Himachal Pradesh
TAB Shahpur -Kangra

Head of Department
Library and Information Science
Central University of Himachal Pradesh
TAB Shahpur -Kangra

Endorsement No:- LIS/1-3/ Gen. Corr./CUHP/21/83 dated 03.08.2021

Central University of Himachal Pradesh
(Established under Central Universities Act 2009)
PO BOX: 21, DHARAMSHALA, DISTRICT KANGRA – 176215, HIMACHAL PRADESH
Website www.cuhimachal.ac.in

File No

Dated: 30/07/2021

To

The Controller of Examination
Central University of Himachal Pradesh
PO Box 21 Dharamshala
Kangra-176215, HP

(Through proper channel)

Subject: ***Submission of Award list and Answer sheets (LIS 401 Ph. D. Course work)***

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3. Attendance sheet, and Question paper LIS 401
4. Answer sheet of End Term Examination 2019 -One

Thanking you

Yours sincerely

30/7/21

30/7/2021

Central University of Himachal Pradesh
TAB Shahpur -Kangra

Head of Department
Library and Information Science
Central University of Himachal Pradesh
TAB Shahpur -Kangra

Endorsement No:- LIS/1-3/ Gen. Corr./CUHP/21/339 dated 03.08.2021

हिमाचल प्रदेश केंद्रीय विश्वविद्यालय
Central University of Himachal Pradesh

F.No. Dir(Research)/2-7/CUHP/18/1962-04 Dated: 03.09.2018

सेवा में

विभागाध्यक्ष
पुस्तकालय एवं सूचना विज्ञान विभाग
हिमाचल प्रदेश केंद्रीय विश्वविद्यालय
शाहपुर परिसर, शाहपुर
जिला काँगड़ा, हिमाचल प्रदेश

विषय: श्रीमती नवनीत कौर, CUHP18RDLIS01, शोधार्थी, पुस्तकालय एवं सूचना विभाग के कोर्स वर्क के सम्बन्ध में।

महोदया,

क. कृपया उपरोक्त विषय का संदर्भ ग्रहण करें।

ख. अतः इस संदर्भ में माननीय कुलपति महोदय से प्राप्त अनुमोदन के आधार पर सम्बन्धित विभाग से इस मामले को शोध परामर्श समिति, बोर्ड ऑफ़ स्टडीज, स्कूल बोर्ड, अकादमिक परिषद तथा कार्यकारिणी परिषद में प्रस्तुत करने का अनुरोध है ताकि शोधार्थी के भविष्य को ध्यान में रखते हुए नियमों का पालन करते हुए उचित निर्णय लिया जा सके।

शोध निदेशक
3/9/18

प्रति:

1. कुलपति के निजी सचिव, माननीय कुलपति महोदय के सूचनार्थ।
2. परीक्षा नियंत्रक, हि. प्र. के. वि.

शोध निदेशक
3/9/18

F.No : Dir.(Research)/2-7/CUHP/16/

हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय
Central University of Himachal Pradesh
Department of New Media

आज़ादी का अमृत महोत्सव

धर्मशाला -176215 दिनांक : 29.12.2021

सेवा में

नवनीत कौर
शोधार्थी, पुस्तकालय और सूचना विज्ञान विभाग
हिमाचल प्रदेश केंद्रीय विश्वविद्यालय
शाहपुर परिसर – शाहपुर
176206

विषय: पीएचडी के कोर्स वर्क का परिणाम घोषित नही होने हेतु |

महोदया |

1. कृपया उपरोक्त विषय का संदर्भ ग्रहण करें |
2. उपरोक्त के संदर्भ में शोध कार्यालय से जारी पत्र संख्या: **Dir.(Research)/2-7/CUHP/16/1902-04 दिनांक: 03.09.2021** के अनुसार माननीय कुलपति महोदय जी से प्राप्त अनुमोदन के आधार पर सम्बन्धित विभाग से इस मामले को शोध परामर्श समिति, बोर्ड ऑफ़ स्टडीज, स्कूल बोर्ड, अकादमिक परिषद् तथा कार्यकारिणी परिषद् में प्रस्तुत करने का अनुरोध था |
3. अतः इस संदर्भ में शोध निदेशक कार्यालय से पहले ही स्पष्ट किया जा चूका है कि इस मामले में आगे की कार्यवाही सम्बन्धित विभाग द्वारा ही की जाएगी |

प्रो. प्रदीप नायर
शोध निदेशक

प्रति :

1. डॉ. डिंपल पटेल, विभागाध्यक्ष, पुस्तकालय और सूचना विज्ञान विभाग, हि.प्र.के.वि, शाहपुर परिसर |
2. परीक्षा नियंत्रक, प्रशासनिक ब्लॉक, हि.प्र.के.वि, धर्मशाला |

प्रो. प्रदीप नायर
शोध निदेशक

School of Education
Central University of Himachal Pradesh
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PO BOX: 21, DHARAMSHALA, DISTRICT KANGRA – 176215, HIMACHAL PRADESH
www.cuhimachal.ac.in; Phone: 01892 237285-2237289, 229330; Fax: 01892 237286

Course Code: TTR 622 (Level 6) / PTLP
Course Name: Pedagogy of Teaching-Learning Process
Nature of Course: University- wide Course
Credits Equivalent: 2 Credits (One credit is equivalent to 10 hours of lectures / organized classroom activity / contact hours; 5 hours of laboratory work / practical / field work / Tutorial / teacher-led activity and 15 hours of other workload such as independent individual/ group work; obligatory/ optional work placement; literature survey/ library work; data collection/ field work; writing of papers/ projects/dissertation/thesis; seminars, etc.)

Course Objectives:
To enable the learners to -

- Understand about teaching-learning process, its various aspects.
- Understand about content analysis and instructional objectives.
- Explain the meaning of curriculum, and discuss principles as well as approaches of curriculum development.
- Understand and practice various teaching skills in concerned subjects.
- Understand and practice different teaching methods and strategies in concerned subjects.
- Understand the concept and types of assessment.
- Develop classroom tests for evaluating students' performance in concerned subjects.
- Understand various latest developments in teaching-learning and assessment processes.
- Explain the meaning of pedagogical analysis and its different components.
- Perform pedagogical analysis in concerned subject areas.

Attendance Requirements:
Students are expected to attend all lectures in order to be able to fully benefit from the course. A minimum of 75% attendance is a must failing which a student may not be permitted to appear in examination.

Evaluation Criteria:

1. Mid Term Examination: 20%
2. End Term Examination: 60%
3. Continuous Internal Assessment: 20% i.e. 20 marks out of 100

Pedagogy of Teaching-Learning Process

COURSE CONTENT

UNIT-I: Basics about Teaching-Learning

Concept and Nature of Teaching and Learning, Objectives of teaching-learning at higher education level, Stages of teaching, Qualities of an Effective Teacher at Higher Level; Understanding psychology of youth and individual differences in classroom; How to tackle individual differences effectively?

UNIT-II: Content Analysis, Instructional Objectives and Classroom Communication

Concept and Process of Content Analysis, Meaning and importance of instructional objectives in behavioural terms, How to write Instructional Objectives in Behavioural Terms? ***(Discipline-specific)***, How to make classroom communication effective?; How to use online/virtual platforms for effective teaching-learning?

UNIT-III: Curriculum Development and Teaching-Learning Material

Meaning, components and types of curriculum, Principles and approaches of curriculum development; How to select content (theory and practical syllabus) and activities for curriculum of a particular course? ***(Discipline-specific),*** Examining effectiveness and usefulness of existing curriculum; How to make effective use of TLM and laboratories for improving TL process? ***(Discipline-specific)***

UNIT-IV: Pedagogical Analysis, Teaching Skills and Methods

Concept and process of pedagogical analysis ***(Discipline-specific)***; Practicing Different Teaching Skills: Skill of introducing the lesson, explaining, illustrating, questioning, stimulus variation, writing on board and achieving closure; Applying Different Teaching Methods and Strategies: Lecture, Lecture-cum-Demonstration, Group & Panel Discussion, Seminars, Tutorials, Team Teaching, etc. ***(Other Discipline-specific Teaching Strategies and Approaches can be included by concerned subject teacher, if needed).***

UNIT-V: Assessment Tools and Techniques

Concept and Types of Assessment: Placement, Formative, Diagnostic and Summative; Applying assessment Tools: Tests, Rating Scales, Rubrics, Quizzes ***(Discipline-specific)***; Applying assessment techniques: Observation, Interview (viva-voce); How to develop

objective type and essay type tests ***(Discipline-specific)***; Marking scheme and assessment of practical skills ***(Discipline-specific)***; Latest developments in evaluation: Grading system and CBCS; CCA; Internal, midterm and end-term evaluation ***(Discipline-specific)***.

****NOTE:** *Even though this is a university-wide course, each department is supposed to depute a teacher for cooperative teaching / team teaching to provide discipline-specific support and inputs to the course instructor from the School of Education, CUHP. The question papers for mid-term and end-term examinations will be set by the course instructor from Department of Education in consultation with the concerned faculty member from respective department/center.*

Books Recommended

Das, R.C. (1993). *Educational Technology – A Basic Text*, Sterling Publishers Pvt. Ltd.

Graeme, K. (1969). *Blackboard to Computers: A Guide to Educational Aids,* London, Ward Lock.

Dandapani, S. (2001). *Advanced educational psychology*, (2nd edition), New Delhi, Anmol publications pvt Ltd.

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Mukhopadhyay, M. (1990). *Educational Technology – Year Book 1988*, All India Association for Educational Technology, New Delhi.

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Sharma, B.M. (1994). Media *and Education*, New Delhi: Commonwealth Publishers.

Venkataiah, N. (1996). *Educational technology*, New Delhi: APH Publishing Corporation.

Dharma, O.P & Bhatnagar O.O. Educational and Communication for Development, Oxford and IBG, New Delhi.

Goldberg, Alvin & Carl, E. Group Communication, Prentice Hall, Inc. New Jersey.

Mangal, S.K. (2004). *Advanced educational psychology*. New Delhi: Prentice hall of India Pvt Ltd.

Santrock, John. W. (2006). *Educational Psychology*, Tata McGraw Hill Publishing Company Limited, New Delhi.

Baron, R.A. (2001) *Psychology*, Pearson Education Inc., New Delhi.

Woolfolk, A. et.al. (2012). *Fundamentals of educational psychology*. New Delhi: Pearson Education

हिमाचल प्रदेश केंद्रीय विश्वविद्यालय
Central University of Himachal Pradesh
(Established under Central Universities Act 2009)
शाहपुर परिसर, शाहपुर, ज़िला काँगड़ा (हि.प्र.) - 176206
ShahpurParisar, Shahpur, Distt. Kangra (HP) - 176206
Website: www.cuhimachal.ac.in

File No.:-LIS/1-12/DRC/CUHP/21/ 194 Date:- 30/10/22

MINUTES OF THE MEETING

A meeting of the Department Research Committee (DRC) of the Department of Library and Information Science, School of Mathematics, Computer and Information Sciences was held on 30.09.2022 at 11:00 AM (onwards) in the CR-6, Central University of Himachal Pradesh, Shahpur Parisar, Shahpur.

The following Ph.D. Scholar's have presented their Six-monthly Progress Report/Work (January to June, 2022) in front of DRC:-

Sl. No.	Name of Ph.D. Student	Roll No.	Work/Progress Report	Synopsis
1.	Vimlesh Patel	CUHP17RDLIS01	Annexure-I	Annexure-I (a)
2.	Abhinandan	CUHP20RDLIS01	Annexure-II	Annexure-II (a)
3.	Akanksha Parmar	CUHP20RDLIS02	Annexure-III	Annexure-III (a)
4.	Priya	CUHP20RDLIS03	Annexure-IV	Annexure-IV(a)
5.	Vikramjeet	CUHP20RDLIS04	Annexure-V	—
6.	Vishal Kumar	CUHP20RDLIS05	Annexure-VI	—
7.	Vivek Aggarwal	CUHP20RDLIS06	Annexure-VII	—
8.	Poonam Chandel	CUHP21RDLIS01	Annexure-VIII	—
9.	Sakshi Devi	CUHP21RDLIS02	Annexure-IX	—

The following matter of Ph.D. course work of Ms. Navneet Kaur (CUHP18RDLIS01) was also placed in the meeting.

1. As per instructions received from the CoE (F. No. COE/1-1/CUHP/18/11629-30 dated 22.6.2021), a committee was constituted to evaluate the Answer sheet of End Term Examination and Internal Assessment for the Course Code: LIS-401 (Endorsement No. LIS/1-3/Gen.Corr./CUHP/21/89 dated 3.8.2021 of Ms. Navneet Kaur (CUHP18RDLIS01).
2. The committee submitted the Award list, Attendance sheets and Question Paper of said courses to the Controller of Examinations through proper Channel (Endorsement No. LIS/1-3/Gen.Corr./CUHP/21/89).
3. The Department received instructions from the Director Research office (F.No.Dir(Research)/2-7/CUHP/16/902-04 dated 03.09.2021 to take approval from the DRC, BOS, School Board, Academic Council and Executive Council as per HVC approval, in this matter.

The DRC unanimously recommended and decided that this matter is not under the preview of DRC. However, keeping in mind the future of the concerned Ph.D. Scholar this matter may be put to the BoS for discussion and further necessary directions/decisions.

Dr. Shivarama Rao K.
Associate Professor
(Member)

Dr. Hahesh Kulharia
Associate Professor
(Director Research Nominee)

Dr. Rajender Kumar
Associate Professor
(Dean's Nominee)

Dr. Dimple Patel
Associate Professor & HoD, LIS
(Chairperson, DRC)

हिमाचल प्रदेश केंद्रीय विश्वविद्यालय
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आज़ादी का अमृत महोत्सव

File No.:-LIS/1-12/DRC/CUHP/21/330 Date:- 28/12/22

MINUTES OF THE MEETING

A **meeting** of the **Department Research Committee (DRC)** of the **Department of Library and Information Science,** School of Mathematics, Computer and Information Sciences was **held** on **28.12.2022** at **10:00 AM** (onwards) in the **CR-5,** Central University of Himachal Pradesh, **Shahpur Parisar, Shahpur.**

The following **Ph.D. Scholar's** have **presented** their **Six-monthly Progress Report/Work/ Synopsis (June to December, 2022)** in front of **DRC:-**

Sl. No.	Name of Ph.D. Student	Roll No.	Work/Progress Report	Synopsis
1.	Vimlesh Patel	CUHP17RDLIS01	**Annexure-1**	
2.	Abhinandan	CUHP20RDLIS01	**Annexure-1I**	
3.	Akanksha Parmar	CUHP20RDLIS02	**Annexure-III**	
4.	Priya	CUHP20RDLIS03	**Annexure-IV**	
5.	Vikramjeet	CUHP20RDLIS04	**Annexure-V**	**Annexure-V (a)**
6.	Vishal	CUHP20RDLIS05	**Annexure-VI**	
7.	Vivek Aggarwal	CUHP20RDLIS06	**Annexure-VII**	
8.	Poonam Chandel	CUHP21RDLIS01	**Annexure-VIII**	**Annexure-VIII (a)**
9.	Sakshi Devi	CUHP21RDLIS02	**Annexure-IX**	**Annexure-IX (a)**

Following Department Research Committee (DRC) :-

Dr. Shivaranjan Rao K.
Associate Professor
(Member)

Dr. Mahesh Kumaria
Associate Professor
(Director Research Nominee)

28-12-22
Dr. Rajender Kumar
Associate Professor
(Dean's Nominee)

Dr. Dimple Patel
Associate Professor & HoD, LIS
(Chairperson, DRC)