ON

## RELEVANCE OF JORDAN CANONICAL FORM

SUBMITTED IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE

OF MASTER OF SCIENCE

IN

**MATHEMATICS** 



IN THE SRINIVASA RAMANUJAN DEPARTMENT OF MATHEMATICS IN THE SCHOOL OF MATHEMATICS COMPUTERS & INFORMATION SCIENCES

SUBMITTED BY: AKHIL

ROLL NO: CUHP20IAM02

### CENTRAL UNIVERSITY OF HIMACHAL PRADESH

SHAHPUR PARISAR, SHAHPUR, KANGRA HIMACHAL PRADESH - 176206



80

ON

## NARAYANA PANDITA'S BIOGRAPHY

&

### HIS WORK

SUBMITTED IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE

IN

MATHEMATICS



IN THE SRINIVASA RAMANUJAN DEPARTMENT OF MATHEMATICS IN THE SCHOOL OF MATHEMATICS, COMPUTERS AND INFORMATION SCIENCES

### SUBMITTED BY:

NAME: ANIKETA KUMARI

ROLL NO: CUHP20IAM03

CENTRAL UNIVERSITY OF HIMACHAL PRADESH

Temporary Academic Block, Shahpur, Kangra,

Himachal Pradesh - 176206

175

ON

## REVIEW OF APPLICATIONS OF VEDIC SUTRAS IN COMPUTER SCIENCE AND ALGEBRA

SUBMITTED IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE
MASTER OF SCIENCE

IN

**MATHEMATICS** 



IN THE SRINIVASAN RAMANUJAN DEPARTMENT OF MATHEMATICS IN THE SCHOOL OF MATHEMATICS COMPUTER & INFORMATION SCIENCES.

### SUBMITTED BY:

ANIL KUMAR

Roll no. -CUHP20IAM04

SHIVANI DHIMAN -

Roll no. -CUHP20IAM29

### CENTRAL UNIVERSITY OF HIMACHAL PRADESH

Shahpur Parisar, Shahpur, Kangra, Himachal Pradesh -176206



#### ON

## GENERATING FUNCTIONS FOR THE PRODUCT OF k-FIBONACCI AND ORTHOGONAL POLYNOMIALS

SUBMITTED TO CENTRAL UNIVERSITY OF HIMACHAL PRADESH FOR THE PARTIAL FULFILLMENT OF THE DEGREE OF M.Sc. (MATHEMATICS)



IN THE SRINIVASA RAMANUJAN DEPARTMENT OF MATHEMATICS IN THE SCHOOL OF MATHEMATICS, COMPUTERS & INFORMATION SCIENCES

### SUBMITTED BY:

NAME: ANSHIKA SHARMA

ROLL NO.: CUHP20IAM05

NAME: SHUBHAM

ROLL NO.:CUHP20IAM30

CENTRAL UNIVERSITY OF HIMACHAL PRADESH, SHAHPUR PARISAR, SHAHPUR KANGRA, HIMACHAL PRADESH -176206

(M)

## DISTRIBUTIVE TYPE PROPERTIES OF SEMIRINGS

A

### PROJECT REPORT

SUBMITTED TO THE SRINIVASA RAMANUJAN DEPARTMENT OF
MATHEMATICS IN THE SCHOOL OF MATHEMATICS, COMPUTERS AND
INFORMATION SCIENCES IN PARTIAL FULFILLMENT
FOR THE DEGREE OF

MASTER OF SCIENCE

IN

**MATHEMATICS** 



Submitted by:

JYOTI DEVI

ROLL NO.: CUHP201AM011

**ASHISH THAKUR** 

ROLL NO.: CUHP201AM06

CENTRAL UNIVERSITY OF HIMACHAL PRADESH ACADEMIC BLOCK SHAHPUR, KANGRA

HIMACHAL PRADESH-176206



ON

## REVIEW OF DIFFERENT MATHEMATICAL **MODELS OF COVID 19**

SUBMITTED IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE

IN

**MATHEMATICS** 



IN THE SRINIVASA RAMANUJAN DEPARTMENT OF MATHEMATICS IN THE SCHOOL OF MATHEMATICS, COMPUTERS AND INFORMATION SCIENCES

SUBMITTED BY:

NAME: BESAR SINGH

ROLL NO: CUHP20IAM07

CENTRAL UNIVERSITY OF HIMACHAL PRADESH

Shahpur Parisar, Shahpur, Kangra,

Himachal Pradesh-17620

# PROJECT REPORT SOME PROBLEMS ON VARIATIONAL ITERATION METHOD

SUBMITTED IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE

IN MATHEMATICS



IN THE SRINIVASA RAMANUJAN DEPARTMENT OF MATHEMATICS IN SCHOOL OF MATHEMATICS, COMPUTERS & INFORMATION SCIENCES.

Submitted By:

NAME: GARGI THAKUR ROLL NO.:CUHP20IAM08

CENTRAL UNIVERSITY OF HIMACHAL PRADESH"

Temporary Academic Block, Shahpur, Kangra HimachalPradesh - 176206



ON

### **Effect of Co-curricular Activities on Students**

SUBMITTED IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE OF

MASTER OF SCIENCE

IN

MATHEMATICS



IN THE SRINIVASA RAMANUJAN DEPARTMENT OF MATHEMATICS IN THE SCHOOL OF MATHEMATICS, COMPUTERS AND INFORMATION SCIENCES

### SUBMITTED BY:

NAME: Hitesh Kumar

ROLL NO: CUHP20IAM09

CENTRAL UNIVERSITY OF HIMACHAL PRADESH

Temporary Academic Block Shahpur, Kangra.

Himachal Pradesh-176206



ON

## CATALAN TRANSFORM OF THE K-JACOBSTHAL SEQUENCES & K-JACOBSTHAL LUCAS SEQUENCES

SUBMITTED IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE

OF MASTER OF SCIENCE

IN

**MATHEMATICS** 



IN THE SRINIVASA RAMANUJAN DEPARTMENT OF MATHEMATICS
IN THE SCHOOL OF MATHEMATICS COMPUTER AND INFORMATION SCIENCES
SUBMITTED BY:

NAME: INDU BALA

NAME: KATYAYANI

ROLL NO: CUHP20IAM10

ROLL NO: CUHP20IAM15

CENTRAL UNIVERSITY OF HIMACHAL PRADESH
SHAHPUR PARISAR, SHAHPUR

HIMACHAL PRADESH -176206



## DISTRIBUTIVE TYPE PROPERTIES OF SEMIRINGS

A

### PROJECT REPORT

SUBMITTED TO THE SRINIVASA RAMANUJAN DEPARTMENT OF MATHEMATICS IN THE SCHOOL OF MATHEMATICS, COMPUTERS AND INFORMATION SCIENCES IN PARTIAL FULFILLMENT

FOR THE DEGREE OF

MASTER OF SCIENCE

IN

**MATHEMATICS** 



Submitted by:

JYOTI DEVI

ROLL NO.: CUHP201AM011

**ASHISH THAKUR** 

ROLL NO.: CUHP201AM06

CENTRAL UNIVERSITY OF HIMACHAL PRADESH

ACADEMIC BLOCK SHAHPUR, KANGRA

HIMACHAL PRADESH-176206



ON

## MATHEMATICAL MODELS OF EBOLA VIRUS DISEASE

A PROJECT REPORT SUBMITTED IN PARTIAL COMPLETION OF THE REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE IN MATHEMATICES



IN SRINIVASA RAMAUJAN DEPARTMENT OF MATHEMATICS
IN SCHOOL OF MATHEMATICS, COMPUTERS AND INFORMATION SCIENCES

SUBMITTED BY

NAME: JYOTI RANI

ROLLNO:CUHP20IAM12

CENTRAL UNIVERSITY OF HIMACHAL PRADESH

Shahpur Parisar, Kangra, Himachal Pradesh-176206 June-2022

# PROJECT REPORT ON Dr. Vashishat narayan singh



IN THE SRINIVASA RAMANUJAN DEPARTMENT OF MATHEMATICS IN THE SCHOOL OF MATHEMATICS, COMPUTERS AND INFORMATION SCIENCES

### SUBMITTED BY:

NAME: Kanu Choudhary

ROLL NO: CUHP20IAM13

"CENTRAL UNIVERSITY OF HIMACHAL PRADESH"
Temporary Academic Block, Shahpur, Kangra, Himachal Pradesh-176206

ON

## COMPARARATIVE STUDY OF ONLINE AND OFFLINE TEACHING MODES AMONG STUDENTS

SEASTITED IN PARTIAL FULFILMENT FOR THE AWARD OF THE DEGREE

OF

MASTER OF SCIENCE

IN

**MATHEMATICS** 



SERVIVASAN RAMANUJAN DEPARTEMENT OF MATHEMATICS IN THE SERVICE OF MATHEMATICS COMPUTER & INFORMATION SCIENCES

SUBMITED BY: MANSI PATHANIA & KAPIL JOSHI

ROLL NO: CUHP20IAM19

CUHP20IAM14

CENTRAL UNIVERSITY OF HIMACHAL PRADESH

SHAHPUR CAMPUS, SHAHPUR, KANGRA HIMACHAL PRADESH – 176206

ON

### CATALAN TRANSFORM OF THE K-JACOBSTHAL SEQUENCES & K-JACOBSTHAL LUCAS SEQUENCES

SUBMITTED IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE
OF MASTER OF SCIENCE

IN

MATHEMATICS



IN THE SRINIVASA RAMANUJAN DEPARTMENT OF MATHEMATICS
IN THE SCHOOL OF MATHEMATICS COMPUTER AND INFORMATION SCIENCES
SUBMITTED BY:

NAME: INDU BALA

NAME: KATYAYANI

ROLL NO: CUHP20IAM10

ROLL NO: CUHP20IAM15

CENTRAL UNIVERSITY OF HIMACHAL PRADESH
SHAHPUR PARISAR, SHAHPUR

HIMACHAL PRADESH -176206

(A)

ON

### A STUDY ON REPRESENTATION OF FINITE GROUPS

SUBMITTED BY PARTIAL FULLFILLMENT FOR THE AWARD OF THE DEGREE OF
MASTER OF SCIENCE

IN

**MATHEMATICS** 



IN THE SRINIVASA RAMANUJAN DEPARTMENT OF MATHEMATICS
IN THE SCHOOL OF MATHEMATICS, COMPUTERS AND INFORMATION SCIENCES

#### SUBMITTED BY:

NAME: KRITIKA CHAUDHARY, RICHA SHARMA

ROLL NO: CUHP20IAM16, CUHP20IAM26

CENTRAL UNIVERSITY OF HIMACHAL PRADESH

SHAHPUR PARISAR, SHAHPUR, KANGRA

HIMACHAL PRADESH- 176206

ON

Introduction To The Duckworth-Lewis-Stern method (DLS)

SUBMITTED IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE

IN MATHEMATICS



IN THE SRINIVASA RAMANUJAN DEPARTMENT OF MATHEMATICS IN THE SCHOOL OF MATHEMATICS, COMPUTERS AND INFORMATION SCIENCES

SUBMITTED BY:

NAME: LAXMI NARAYAN

ROLL NO: CUHP20IAM17

CENTRAL UNIVERSITY OF HIMACHAL PRADESH

Shahpur Parisar, Shahpur, Kangra, Himachal Pradesh-176206

92

ON

### RESIDUAL POWER SERIES METHOD AND ITS APPLICATION

SUBMITTED IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE OF

MASTER OF SCIENCE

IN

**MATHEMATICS** 



IN THE SRINIVASA RAMANUJAN DEPARTMENT OF MATHEMATICS
IN THE SCHOOL OF MATHEMATICS, COMPUTER AND INFORMATION SCIENCE

#### SUBMITTED BY:

NAME: MANINDER SINGH

ROLL NO: CUHP20IAM18

CENTRAL UNIVERSITY OF HIMACHAL PRADESH

Temporary Academic Block, Shahpur, Kangra Himachal Pradesh-176206



ON

## COMPARARATIVE STUDY OF ONLINE AND OFFLINE TEACHING MODES AMONG STUDENTS

SENTITED IN PARTIAL FULFILMENT FOR THE AWARD OF THE DEGREE

OF

MASTER OF SCIENCE

IN

MATHEMATICS



SERVIVAS AN RAMANUJAN DEPARTEMENT OF MATHEMATICS IN THE SERVICE OF MATHEMATICS COMPUTER & INFORMATION SCIENCES

SUBMITED BY: MANSI PATHANIA & KAPIL JOSHI

ROLL NO: CUHP20IAM19

CUHP201AM14

CENTRAL UNIVERSITY OF HIMACHAL PRADESH

SHAHPUR CAMPUS, SHAHPUR, KANGRA HIMACHAL PRADESH – 176206

## ON k-MERSENNE-LUCAS NUMBERS AND THEIR PROPERTIES

SUBMITTED IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE MASTER OF SCIENCE

IN

**MATHEMATICS** 



SRINIVASA RAMANUJAN DEPARTMENT OF MATHEMATICS
SCHOOL OF MATHEMATICS, COMPUTERS & INFORMATION SCIENCES

SUBMITTED BY:

MONIKA (CUHP20IAM20) RENUKA THAKUR (CUHP20IAM25)



CENTRAL UNIVERSITY OF HIMACHAL PRADESH SHAHPUR CAMPUS, SHAHPUR, KANGRA 176206 JUNE 2022

ON

"G-sets and G-psets"

SUBMITTED IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE

IN

MATHEMATICS



IN THE SRINIVASA RAMANUJAN DEPARTMENT OF MATHEMATICS IN THE SCHOOL OF MATHEMATICS, COMPUTERS AND INFORMATION SCIENCES

### SUBMITTED BY:

NAME: NEHA THAKUR, ROLL NO: CUHP20IAM21 NAME: SONU KUMAR, ROLL NO: , CUHP20IAM31

CENTRAL UNIVERSITY OF HIMACHAL PRADESH SHAHPUR PARISAR, SHAHPUR, KANGRA, HIMACHAL PRADESH- 176206

ON

## SOME MATHEMATICAL MODELS FOR INFECTIOUS DISEASES

SUBMITTED IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE

IN

**MATHEMATICS** 



IN THE SRINIVASA RAMANUJAN DEPARTMENT OF MATHEMATICS IN THE SCHOOL OF MATHEMATICS, COMPUTERS AND INFORMATION SCIENCES

### SUBMITTED BY

Name: POONAM

Roll no. CUHP20IAM22

## CENTRAL UNIVERSITY OF HIMACHAL PRADESH

Shahpur Parisar, Shahpur, Kangra, Himachal Pradesh-176206 June-2022

## HOMOTOPY PERTURBATION METHOD

SUBMITTED IN PARTIAL FULFILLMENT FOR THE DEGREE OF MASTER OF SCIENCE IN MATHEMATICS



IN THE SRINIVASA RAMANUJAN DEPARTMENT OF MATHEMATICS IN THE SCHOOL OF MATHEMATICS, COMPUTERS AND INFORMATION SCIENCES

### SUBMITTED BY:

NAME: PRAVEEN KUMAR ROLL NO: CUHP20IAM23

CENTERAL UNIVERSITY OF HIMACHAL PRADESH Academic Block Shahpur, Kangra Himachal Pradesh-176206

## EFFECT OF COVID -19 LOCKDOWN AND ITS IMPACT ON STUDENT LIFE AND SOCIAL MEDIA

SUBMITTED IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE

OF

MASTER OF SCIENCE

IN

**MATHEMATICS** 



IN THE SRINIVASAN RAMANUJAN DEPARTMENT OF MATHEMATICS IN THE SCHOOL OF MATHEMATICS COMPUTER & INFORMATION SCIENCES.

SUBMITTED BY PRITI

ROLL NO: CUHP20IAM24

CENTRAL UNIVERSITY OF HIMACHAL PRADESH

Academic Block SHAHPUR, KANGRA

Himachal Pradesh-176206

### ON k-MERSENNE-LUCAS NUMBERS AND THEIR PROPERTIES

SEMITTED IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE MASTER OF SCIENCE

IN

**MATHEMATICS** 



SRINIVASA RAMANUJAN DEPARTMENT OF MATHEMATICS SCHOOL OF MATHEMATICS, COMPUTERS & INFORMATION SCIENCES

SUBMITTED BY:

MONIKA (CUHP20IAM20) RENUKA THAKUR (CUHP20IAM25)



CENTRAL UNIVERSITY OF HIMACHAL PRADESH SHAHPUR CAMPUS, SHAHPUR, KANGRA 176206 JUNE 2022

ON

## A STUDY ON REPRESENTATION OF FINITE GROUPS

SUBMITTED BY PARTIAL FULLFILLMENT FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE

IN

MATHEMATICS



IN THE SRINIVASA RAMANUJAN DEPARTMENT OF MATHEMATICS
IN THE SCHOOL OF MATHEMATICS, COMPUTERS AND INFORMATION SCIENCES

### SUBMITTED BY:

NAME: KRITIKA CHAUDHARY, RICHA SHARMA

ROLL NO: CUHP20IAM16, CUHP20IAM26

CENTRAL UNIVERSITY OF HIMACHAL PRADESH

SHAHPUR PARISAR, SHAHPUR, KANGRA

HIMACHAL PRADESH- 176206

# PROJECT REPORT ON MATHEMATICAL ANALYSIS OF TUMOR GROWTH AND ITS TREATMENT

SUBMITTED IN THE PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE OF
MASTER OF SCIENCE
IN
MATHEMATICS



IN THE SRINIVASA RAMANUJAN DEPARTMENT OF MATHEMATICS
IN THE SCHOOL OF MATHEMATICS, COMPUTERS AND INFORMATION SCIENCES

SUBMITTED BY:

NAME: SAPNA SHARMA ROLL NO: CUHP20IAM27

CENTRAL UNIVERSITY OF HIMACHAL PRADESH
Shahpur Parisar, Shahpur, Kangra,
Himachal Pradesh- 176206



## On q-Homotopy Analysis Method

SUBMITTED TO CENTRAL UNIVERSITY OF HIMACHAL PRADESH FOR THE PARTIAL FULFILMENT OF THE DEGREE OF MSc.(MATHEMATICS)



IN THE SRINIVASA RAMANUJAN DEPARTMENT OF MATHEMATICS IN THE SCHOOL OF MATHEMATICS, COMPUTERS & INFORMATION SCIENCES.

## Submitted By:

NAME: SAVITA

ROLL NO.:CUHP20IAM28
CENTRAL UNIVERSITY OF HIMACHAL PRADESH
Temporary Academic Block, Shahpur, Kangra
Himachal Pradesh - 176206

ON

## REVIEW OF APPLICATIONS OF VEDIC SUTRAS IN COMPUTER SCIENCE AND ALGEBRA

SUBMITTED IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE MASTER OF SCIENCE

IN

**MATHEMATICS** 



IN THE SRINIVASAN RAMANUJAN DEPARTMENT OF MATHEMATICS IN THE SCHOOL OF MATHEMATICS COMPUTER & INFORMATION SCIENCES.

### SUBMITTED BY:

ANIL KUMAR

Roll no. -CUHP20IAM04

SHIVANI DHIMAN -

Roll no. -CUHP20IAM29

## CENTRAL UNIVERSITY OF HIMACHAL PRADESH

Shahpur Parisar, Shahpur, Kangra, Himachal Pradesh -176206



ON

## GENERATING FUNCTIONS FOR THE PRODUCT OF k-FIBONACCI AND ORTHOGONAL POLYNOMIALS

SUBMITTED TO CENTRAL UNIVERSITY OF HIMACHAL PRADESH FOR THE PARTIAL FULFILLMENT OF THE DEGREE OF

M.Sc. (MATHEMATICS)



IN THE SRINIVASA RAMANUJAN DEPARTMENT OF MATHEMATICS IN THE SCHOOL OF MATHEMATICS, COMPUTERS & INFORMATION SCIENCES

### SUBMITTED BY:

NAME: ANSHIKA SHARMA

ROLL NO.: CUHP20IAM05

NAME: SHUBHAM

ROLL NO.:CUHP20IAM30

CENTRAL UNIVERSITY OF HIMACHAL PRADESH, SHAHPUR PARISAR, SHAHPUR

KANGRA, HIMACHAL PRADESH -176206



ON

"G-sets and G-psets"

SUBMITTED IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE OF

MASTER OF SCIENCE

IN

MATHEMATICS



IN THE SRINIVASA RAMANUJAN DEPARTMENT OF MATHEMATICS IN THE SCHOOL OF MATHEMATICS, COMPUTERS AND INFORMATION SCIENCES

### SUBMITTED BY:

NAME: NEHA THAKUR, ROLL NO: CUHP20IAM21 NAME: SONU KUMAR, ROLL NO: , CUHP20IAM31

CENTRAL UNIVERSITY OF HIMACHAL PRADESH SHAHPUR PARISAR, SHAHPUR, KANGRA, HIMACHAL PRADESH- 176206

ON

# INTRODUCTION ON WEIGHTED RESIDUAL METHODS

SUBMITTED TO CENTRAL UNIVERSITY OF HIMACHAL PRADESH FOR THE PARTIAL FULFILLMENT OF DEGREE OF M.SC MATHEMATICS



IN THE SRINIVASA RAMANUJAN DEPARTMENT OF MATHEMATICS IN THE SCHOOL OF MATHEMATICS, COMPUTERS & INFORMATION SCIENCES

Submitted by

NAME - VAISHALI

ROLL NO - CUHP20IAM032

CENTRAL UNIVERSITY OF HIMACHAL PRADESH

SHAHPUR PARISAR, SHAHPUR

KANGRA, HIMACHAL PRADESH -176206