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M.Sc. I sem Project - 2022-23
Paper - I (Adv. Abst. Algebra)
Subject - Maths.

Date - 05/12/2022

S.N.	Students Name	Roll No.	Sign.
01	Anamika Jena	23305081000 01	Anamika
02	Digeshwar Kumar	23305081000 2	Digeshwar
03	Gautham Sinha	23305081000 3	Gautham
04	Kanchan Dewangan	23305081000 4	Kanchan
05	Khushi Chandrakar	23305081000 5	Khushi
06	Krishna Kumar	23305081000 6	Krishna
07	Kunal	23305081000 7	Kunal
08	Lokeshwaranand	23305081000 8 Mo. Ramanand	Lokeshwaranand
09	Mohnish	23305081000 9	Mohnish
10	Neelima Patel	23305081001 0	Neelima
11	Nikita Dewangan	23305081001 1	Nikita
12	Pragati	23305081001 2	Pragati
13	Prashant Kumar Sahu	23305081001 3	Prashant
14	Pratima Sahu	23305081001 4	Pratima
15	Ritu Sahu	23305081001 5	Ritu
16	Rupesh Dewangan	23305081001 6	Rupesh
17	Tenesh Sahu	23305081001 7	Tenesh
18	Vaseem Qunaishi	23305081001 8	Vaseem Qunaishi

05/12/2022

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Topics:

- nilpotent Group.
- normal and seperable extension
- Extension field
- Polynomial
- Taylor series
- Algebraic number and Transcadental no
- Splitting fields
- Algebraically closed fields
- Isolvability of general equation of degree 5 by ra
- Embedding and kronecken.
- Perfect fields
- Solvable group
- Galois theory
- Primitive element.
- Normal subnormal, subgroup, composition series
- Automorphism of Extension
- Finite Field
- Radicals

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पाटन,जि.– दुर्ग (छ.ग.)

M.Sc. I Sem. Project topic. 2022-23

Paper:- II (Real Analysis-I)

Subject:- Maths.

Date:- 05/12/2022

Sl.No.	Students Name	Roll No.	Sign	Topic.
01	Anamika Jena	23305081000[illegible]	Anamika	Lagranges multipliers.
02	Digeshwar kumar	2330508100002	Digeshwar	Jacobian
03	Ghritkumari Sinha	2330508100003	Ghritkumari	Inverse function Theorem
04	Kanchan Dewangan	2330508100004	Kanchan	Sequence and Series
05	Khushi Chandrakar	2330508100005	Khushi	Power series
06	Krishna Kumar	2330508100006	Krishna	Partition of unity
07	Kunal	2330508100007	Kunal	Interchange of the order of Differentiation.
08	Lokeshwaranand	[illegible]	Lokeshwaranand	Extremum Problems with constraints.
09	Mohnish	2330508100009	Mohnish	Weierstrass approximation Theorem
10	Neelima Patel	2330508100010	Neelima	Differentiation and Integration.
11	Nikita Dewangan	2330508100011	Nikita	Rearrangement of terms of a series.
12	Pragati	2330508100012	Pragati	Implicite function
13	Prashant kumar Sahu	2330508100013	Prashant	Derivative of Higher Order, Taylor's theorem.
14	Pratima Sethi	2330508100014	Pratima	Taubeer theorem
15	Ritu Sahu	2330508100015	Ritu	Abel & Dirichlet test
16	Rupesh Dewangan	2330508100016	Rupesh	Stokes theorem
17	Temesh sahu	2330508100017	Temesh	Extreme Point
18	Vaseem Qureishi	2330508100018	Vaseem Qureishi	Abels Theorem (1 & 2)

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M.Sc. I Sem. Project - 2022-23

Paper: III (Topology)

Subject - Maths

Date - 05/12/2022

S.N.	Name of Students	Roll No.	Sign
01	Anamika Jena	23305081000l	Anamika
02	Digeshwar kumar	2330508l0002	Digeshwar
03	Ghritkumari Sinha	233050810003	Ghritkumari
04	Kanchan Dewangan	2330508l0004	Kanchan
05	Khushi chandrakar	233050810005	Khushi
06	Krishna Kumar sahu	233050810006	Krishna
07	Kunal	233050810007	Kunal
08	Lokeshwaranand	233050810008 Md. Rahmanand	Lokeshwaranand
09	Mohnish	233050810009	Mohnish
10	Neelima Patel	233050810010	Neelima
11	Nikita Dewangan	233050810011	Nikita
12	Pragati	233050810012	Pragati
13	Prashant kumar Sahu	233050810013	Prashant
14	Pratima Sahu	233050810014	Pratima
15	Ritu sahu	233050810015	Ritu sahu
16	Rupesh Dewangan	233050810016	Rupesh
17	Topology	233050810017	Topology
18	Vaseem Munaishi	233050810018	Vaseem Munaishi
1			

Topics.

Scroeder - Bernstein theorem
seperation axioms
Cardinal number and it's Arthemetic
Continuous Function and Homeomorphism.
Sub bases, bases, and relative topology
Topological space interior Point and set anders
Lindeloffs theorem.
Kuratowski closure function
Tietze extension theorem
Well-Ordered set and Zorn's Lemma
Continuous function and compact set
First and Second countable
Sequentialy and Countably Compact set
Stone-cech compactication
Topological space type of topology, openset closed set
Urysohns Lemma
Cantor theorem
Locally connected space.

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M.Sc. I Sem. project - 2022-23

Paper- IV (Complex Analysis)

Subject - Maths.

Date- 05/12/2022

S.N.	Name of Students	Roll No.	Sign	Topics.
01	Anamika Jena	23305081 0001	Anamika	Rouche's theorem
02	Dijeshwar kumar	23305081 0002	Dijeshwar	Montel theorem
03	Ghritkumari Sinha	23305081 0003	Ghritkumari	Maximum Modulus Principal
04	Kanchan Dewangan	23305081 0004	Kanchan	Residue.
05	Khushi Chandrakar	23305081 0005	Khushi	Jordan Holder theorem
06	Krishna Kumar	23305081 0006	Krishna	Weierstrass Theorem
07	Kunal	23305081 0007	Kunal	The Argument principle.
08	Lokeshwaranand	23305081 0008	Lokeshwaranand	Spaces of continuous functions
09	Mohnish	23305081 0009	Mohnish	meromorphic functions.
10	Neelima Patel	23305081 0010	Neelima	Cross-Ratio, Preservance of Cross-Ratio Under
11	Nikita Dewangan	23305081 0011	Nikita	Poissons integral formula, Bilinear.
12	Pragati	23305081 0012	Pragati	Necessary and sufficient confirmal mapping
13	Prashant Kumar Sahu	23305081 0013	Prashant	Hurwitz's theorem
14	Pratima Sahu	23305081 0014	Pratima	Rimann mapping theorem
15	Ritu Sahu	23305081 0015	Ritu	Cauchy's Goursat theorem
16	Rupesh Dewangan	23305081 0016	Rupesh	Inverse Function
17	Tenesh Sahu	23305081 0017	Tenesh	Isolated Singularity
18	Vaseem Qureishi	23305081 0018	Vaseem	Bilinear transformation

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M.Sc. I Sem. Project 2022-23
Paper V (Grdv. Discrete Mathematics)
Subject Maths

Date- 05/12/2022

Sr.	Name of Students	Roll No.	Sign
01	Anamika Jena	23305081000 1	Anamika
02	Digeshwar Kumar	23305081000 2	Digeshwar
03	Girish kumar Sinha	23305081000 3	Girish
04	Kanchan Dewangan	23305081000 4	Kanchan
05	Khushi chandrakar	23305081000 5	Khushi
06	Krishna Kumar	23305081000 6	Krishna
07	Kunal	23305081000 7	Kunal
08	Lokeshwaranand	23305081000 8	Lokeshwaranand
09	Mahnish	23305081000 9	Mahnish
10	Neelima Patel	23305081001 0	Neelima
11	Nikita Dewangan	23305081001 1	Nikita
12	Pragati	23305081001 2	Pragati
13	Prashant kumar Sahu	23305081001 3	Prashant
14	Pratima Sahu	23305081001 4	Pratima
15	Ritu Sahu	23305081001 5	Ritu
16	Rupesh Dewangan	23305081001 6	Rupesh
17	Temesh Sahu	23305081001 7	Temesh
18	Vaseem Qureishi	23305081001 8	Vaseem

Topic.

Lattice as Poset
Boolean lattice and Boolean algebra
Algebraic Lattice
Boolean function & Boolean expressions.
Lattice
Monoid group
Regular Expressions, Kleens theorem, Pumping Lemma
Boolean Algebras as lattice various forms.
Design and implementation of digital networks
Homomorphism of Semigroup (Ex and Th^m)
Argument Valid & Invalid rule of inference
Switching circuit
Basic logical Operation
semigroup. Properties of Semi-group
Contex free grammer. contex free language
Disjunction and conjunction Normal Forms.
Homomorphism of semigroup and Monoid
Algebra of proposition & Logic gate

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M.Sc. III Sem. Project 2022-23
Paper - I (Functional Analysis)
Subject - Maths.

Date: 05/12/2022

S.N.	[illegible] of Students	Roll No.	Sign	Topic
1	Mamta Sahu	21305081008	Mamta	Riesz Markove Theorem
2	Sudha Dewangan	21305081020	सुधा	Norm vector space
3	Shweta Sahu	21305081019	Shweta	Bounded linear transformation
4	Parmeshwari	21305081011	परमेश्वरी	Jordan decomposition theorem
5	Tripti	21305081022	Tripti	Normed linear Transformation and Banach
6	Tikeshwari	21305081021	Tikeshwari	Dual simplex method
7	Laxmikant	21305081007	[illegible]	Weak convergence
8	NEHA VERMA	21305081009	Neha	Fubini's theorem Differential Integration
9	Pallavi Banchhor	21305081010	Pallavi	Radon Nikodym Theorem
10	Preeti	21305081015	Preeti	Hahn decomposition theorem.
11	Pragati yadav.	21305081014	प्रगति	Jordan Decomposition Theorem
12	Aarti	21305081001	Aarti	Contraction mapping theorem
13	VANDANA DEWANGAN	21305081023	Vandana	Lebesgue-Stieltjes Integral
14	Shilpee Dewangan	21305081013	Shilpee	Produc Measure and fubini's Theorem
15	Shailee	21305081017	Shailee Sahu	Riesz Representation Theorem
16	Pushpendra	21305081016	पुष्पेन्द्र	Picard's Theorem
17	Pooja Nishad	21305081018	Nishad	The Banach Fixed theorem
18	CHITARANJAN	21305081002	Chitranjan	Example Convex function
19	Piyush kumar Sahu	21305081012	पीयूष	Banach Fixed point Theorem.
20	Deepprakash	21305081003	[illegible]	Banach fixed point as a source of existence
21	Dushyant Das.	21305081005	Dushyant	Normed Linear space.

[illegible] 05/1/2023

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[illegible] महाविद्यालय
[illegible] दुर्ग (छ

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M.Sc. III Sem. Project 2022-23
Paper - II (Partial Differential eqn.)
Subject - Maths.

Date- 05/12/2022

S.N.	Name of Students	Roll No.	Sign	Topic
1	Mamta Sahu	21305081008	[signature]	Cauchy Kovalevskaya Theorem
2	Sudha Dewangan	21305081020	[signature]	Hamilton Jacobi Equation
3	Shweta Sahu	21305081019	[signature]	Euler - Lagrange equation
4	Parmeshwari	21305081011	[signature]	LAX OLEINIC Formula
5	Tripti	21305081022	[signature]	similarity solution
6	Takeshwar	21305081021	[signature]	EXTENsion Principle for fuzzy set
7	Laxmikant	21305081007	[signature]	Fourier Transform
8	Neha VERMA	21305081009	[signature]	Laplace
9	Pallavi Banchhor	21305081010	[signature]	Wave equation and homogeneous wave equation
10	Preeti	21305081015	[signature]	Green's function
11	Pragati yadav	21305081014	[signature]	Heat equation and fundamental soln of Mean value
12	Aarti	21305081001	[signature]	fundamental Solutions of Laplac's equation
13	VANDANA DEWANGAN	21305081023	[signature]	Heat equation for mean value formula
14	Shilpee Dewangan	21305081018	[signature]	Characteristic
15	Shailee	21305081017	[signature]	Laplace Equation
16	Pushpendra	21305081016	[signature]	Laplace Transformation Half-Cole Transformation
17	Pooja Nishad	21305081013	[signature]	Energy method Green Function
18	CHITARANJAN	21305081002	[signature]	Real Analytic function
19	Piyush kumar Sahu	21305081012	[signature]	Hodograph and legendre transformation
20	Durgeshwari	21305081003	[signature]	Singular perturbation and laplace's method
21	Dushyant Das	21305081005	[signature]	Hamilton's ODE

[signature] 05/12/2022

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M.Sc. III Sem. Project - 2022-23
Paper - III (Fuzzy Set)
Subject - Maths.

Date - 01/12/2022

S.N.	Name of Students	Roll No.	Sign	[illegible]ics.
1	Mamta Sahu	21305081008	Mamta	Operation on fuzzy set
2	Sudha Dewangan	21305081020	सुधा	Max - Min composition
3	Shweta Sahu	21305081019	Shweta	Characterization theorem of t - norms.
4	Parmeshwari	21305081011	परमेश्वरी	Fuzzy Number
5	Tripti	21305081022	[illegible]	characterization theorem of fuzzy Complement
6	Takeshwari	21305081021	Takeshwari	HEAT equation Theorem
7	Laxmikant	21305081007	[illegible]	T-norms and T-conorms
8	Neha	21305081009	[illegible]	the extension principle the zadeh's
9	Pallavi Banchhor	21305081010	Pallavi	Fuzzy set Basic definition, α-level set Convex set, Cont. [illegible]
10	Preeti	21305081015	Preeti	Fuzzy relation on fuzzy sets.
11	Pragati Yadav	21305081014	प्रगति	Decreasing Genrator
12	Aarti	21305081001	Aarti	Decomposition theorem
13	VANDANA DEWANGAN	21305081023	Vandana	Fuzzy relation
14	Shilvee Dewangan	21305081018	Shilvee	Camparability Relation
15	Shailee	21305081017	Shailee	fuzzy relation equation
16	Pushpendra	21305081016	[illegible]	Evidence Theory
17	Bisa Nishad	21305081013	[illegible]	The zadeh's extenstion
18	CHITARANJAN	21305081002	Chitaranjan	Possibility theory probability theory
19	Piyush Kumar Sahu	21305081012	पीयूष	Min - Max composition & its property.
20	Durgaprakash	21305081005	[illegible]	Fuzzy aritmetic
21	Dushyant Das	21305081005	Dushyant	Possibility theory - fuzzy measures.

Seen
01/12/2022

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M.Sc. III Sem. Project - 2022-23
paper - IV (Operation Research)
Subject - Maths

Date - 05/12/2022

S.N	Name of Students	Roll no.	Signature	Topics
1	Mamta Sahu	21305081008	Mahu	Two Phase Method
2	Sudha Dewangan	21305081020	सुधा	Minimum spanning Trees
3	Shweta Sahu	21305081019	Shweta	Operation research
4	Parmeshwari	21305081011	परमेश्वरी	Network Analysis
5	Tripti	21305081022	Tripti	PERT (Programming Evalution Review Technique
6	Takeshwari	21305081022	Takeshwari	DIJKSTRAS Algorithm
7	Laxmikant	21305081007		Linear Goal Programming
8	Neha Verma	21305081009	Neha	Parametric Problem
9	pallavi Banchha	21305081010	Pallavi	Critical path method
10	Preeti	21305081015	Preeti	Theory of the simplex method
11	Pragati yadav	21305081014	प्रगति	Reduction theorem
12	Aarti	21305081001	Aarti	BIG M method and Two phase method
13	VANDANA DEWANGAN	21305081023	Vandana	Assignment problem
14	Shilvee Dewangan	21305081018	Shilvee	Operation Research and its scope
15	Shailee	21305081017	Shailee	Duality and sensitivity analysis
16	Pushpendra	21305081016	पुष्पेन्द्र	Dual Simplex methode
17	Pooja Nishad	21305081013	Nishad	PERT/CPM
18	CHITRANJAN	21305081002	Chitranjan	minimum cost flow
19	Piyush kumar Sahu	21305081012	पीयूष	Network simplex Method
20	Devprakash	21305081003	देव	Maximum flow problem
21	Dushyant Das	21305081005	Dushyant	Parametric Linear Programming

Sem

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पाटन,जि.—दुर्ग

M.Sc. III Sem. Project - 2022-23
Paper - V (Graph Theory)
Subject - Maths

Date - 05/12/2022

Sr.	Name of Students	Roll No.	Sign
1.	Mamta Sahu	21305081008	
2	Sudha Dewangan	21305081020	
3	Shweta Sahu	21305081019	
4	Parmeshwari	21305081011	
5	Tripti	21805081022	
6	Tikeshwari	21305081021	
7	Laxmikant	21305081007	
8	Neha Verma	21305081004	
9	Pallavi Banchhor	21305081010	
10	Preeti	21305081015	
11	Pragati Yadav	21305081014	
12	Aarti	21305081001	
13	VANDANA DEWANGAN	21305081023	
14	Shilvee dewangan	21305081018	
15	Shailee Sahu	21305081017	
16	Rishpendra	21805081016	
17	Pooja Nishad	21305081013	
18	CHITRANJAN	21305081002	
19	Piyush kumar Sahu	21305081012	
20	Durgprasad	21805081003	
21	Dushyant Dar.	21305081005	

Topics.

Cycle Graph, Cycle Space
Operations on Graph and Binary Operation
& circular arc graph, split graph, triangulated graph
Colouring packing and Covering
Colouring packing and Covering
GRAPH Colouring
Binary operations on Graphs
Combinational formulation.
Vertex Colouring Critical graph & chromatic Number
Setting up of combinations formulation
combinational formulation
Operation graph & binary operation.
Perfect graph.
Comparability graph
matric and vertex space
Click Parameter Resenfield
Face colouring . beheyd Chromatic
Homomorphism, Contruction, Derived Graph
Girth chromatic Number & Uniquely colorable graph
matrices and vector spaces of a graph and adjacency matrix
Matrices and vector spaces

05/12/2022

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(61) MSc-4 Sem (2022-23)

Paper-I Functional Analysis

SN	Roll No.	Name of Student	Father's Name	Signature
1	21305081001	Aarti	Kehar singh	Aarti
2	21305081002	CHITARANJAN	MAHAOAS	chitaranjan
3	21305081003	Dewprakash	Mohanlal	
4				
5				
6				
7	21305081007	Laxmikant	Nitmani	
8	21305081008	Mamta Sahu	Tilochan Sahu	Mahi
9	21305081009	Neha verma	Suresh kumar	Neha
10	21305081010	Pallavi Bandhan	Chandrashekhar	Pallavi Bandhan
11	21305081011	parmeshwari	Ramprasad	Parm
12	21305081012	Piyush kumar	Suresh kumar	Piyush
13	21305081013	Pooja Nishad	Meghnath	Pooja
14	21305081014	Prajakti yadav	Radheshyam	Prajakti
15	21305081015	Preeti	Parasram	Preeti
16	21305081016	Pushpendra kumar	Nandkishor	Pushpendra
17	21305081017	Shailee Sahu	Dacharan Sahu	Shailee
18	21305081018	Shilee Deengan	Dinesh	Shilee
19	21305081019	Shweta Sahu	Jayprakash Sahu	Shweta
20	21305081020	Sudha	Satish	Sudha
21	21305081021	Takeshwari	Pahlam Lal	Takeshwari
22	21305081022	Tripti	Rajendra kumar	Tripti
23	21305081023	VANDANA TEKAM	PRAKASH CHAND	Vandana

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Project Copy Submitted (62)

class-MSc-4 (maths) Date-24-4-2023

Name of the Topic
open mapping theorem.
closed graph theorem
Riesz Representation theorem.
complete orthonormal sets
Structure of hilbert space
Uniform Bounded theorem
Riesz-fisher Theorem
complex Linear space and Normed Linear
Self Adjoint Operation.
open mapping and closed graph theorem
Bessel's Inequality.
Riesz representation theorem.
Adjoint operators
Hahn Banach theorem for real linear space normed linear
closed Graph theorem, uniform boundness theorem.
Reflexive Banach spaces.
Abstract variational boundary value problem
closed range theorem
The Generalized Lax milgram theorem.
Hahn-Banach Theorem

Principal
Govt College of Arts and Science
College Patan, Distt-Durg (C.G.)

M.Sc - 4 Sem

Paper - II, Mechanics

S.N.	Roll.no	Name of student	Father's Name	Sign	Name of the topic
1	21305081001	Aarti	Kehar singh	Aarti	Generalized Co-ordinates.
2	21305081002	CHITTARANJAN	MAHADAS	[signature]	Holonomic and non holonomic Constraints, scleronomic Rh. n.S.
3	21305081003	Durgaprakash	Mohan lal	[signature]	Surface Integral of Normal attraction.
4					
5					
6					
7	21305081007	Laxmikant	Nilmani	[signature]	Hamiltⁿ as constant Routh eqⁿ. Total Energy system.
8	21305081008	Mamta Sahu	Tilochand	[signature]	Poisson Bracket invariant under can.
9	21305081009	Neha verma	Sureshkumar	Neha	fundamental poisson Bracket Jacobi poisson theorem
10	21305081010	Pallavi Banchhor	Chandrashekhar	Pallavi	Calculus of variation of function shortest distance
11	21305081011	Parmeshwari	Ramprasad	[signature]	minimum surface of revolution Brachistochrone prob
12	21305081012	Piyush kumar	Suresh kumar	[signature]	Principle of least Action, Poincaré-Cartan, Whittaker's.
13	21305081013	pooja Nishad	meghnath	[signature]	Euler lagrange Equation
14	21305081014	Pragati yadav	Radheshyam	प्रगति	Fundamental lemma of calculus of variables Euler's
15	21305081015	Preeti	Parasram	Preeti	Hamilton-Jacobi eqⁿ, Jacobi theorems, Hamilton's principle fo
16	21305081016	Pushpendra kumar	Nand kumar	[signature]	Invariance of lagrange Brakets Under canonical tr
17	21305081017	Shailee Sahu	Devcharan Sahu	[signature]	Canonical transformation and Properties of generating fⁿ
18	21305081018	Shilpee Dewangan	Dinesh	Shilpee	Work done by self attracting system
19	21305081019	Shweta Sahu	Jayprakash sahu	Shweta	Equipotential surface, solid harmonics
20	21305081020	Sudha	Satish	सुधा	Lagrangian eqⁿ of motion 1st & 2nd kind
21	21305081021	Takeshwar	Pachurlal	[signature]	Potential of rod, discs, spherical shells, sphere
22	21305081022	Tripti	Rajendra Kumar	[signature]	Attraction of rod, Disc spherical shells
23	21305081023	VANDANA DEWANGAN	PRAKASH CHAND	[signature]	Hamilton's principle

[signature]
22-4-23

[signature]
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[signature]
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[signature] [signature]

65

MSc - 4 Sem

Paper (III) - Fuzzy set

66

Sr.	Roll No.	Name of the Student	Father's Name	Sign	Name of the topic
1	21305081001	Aarti	kehar singh	Aarti	Fuzzy logics, Three valued and many-valued fuzzy Quantifiers.
2	21305081002	CHITARANJAN	MAHADAS	Chitaranjan	
3	21305081003	Deepprakash	Mohanlal	[signature]	Fuzzy linear programming with Ex.
4					
5					
6					
7	21305081007	Laxmikant	Nilmani	[signature]	fuzzy inference & proposition
8	21305081008	Mamta Sahu	Tilochan Ram	[signature]	Fuzzy implication and axioms
9	21305081009	Neha verma	Suresh Kumar	Neha	Approximation and plausible reasoning and fuzzy language
10	21305081010	Pallavi Barchha	Chandrashekhar	Pallavi Barchha	fuzzy Neural Network and fuzzy automata
11	21305081011	Parmeshwari	Ramprasad	[signature]	Individual Decision making
12	21305081012	Piyush kumar	Suresh kumar	[signature]	Defuzzyfication.
13	21305081013	Pooja Nishad	Meghnath	[signature]	Reflexive space and Hilbert space
14	21305081014	Ragati Yadav	Radheshyam Yadav	[signature]	multiperson decision making with Example
15	21305081015	Preeti	Parasram	Preeti	Fuzzy rule based systems & their examples.
16	21305081016	Pushpendra kumar	Nand kumar	[signature]	fuzzy logic controller fuzzification
17	21305081017	Shailee Sahu	Devcharan Sahu	Shailee	Fuzzy Ranking method with Example
18	21305081018	Shilvee Dewangan	Dinesh Dewangan	Shilvee	Knowledge base Component and inference
19	21305081019	Shweta Sahu	Jayprakash sahu	Shweta	Fuzzy control system.
20	21305081020	Sudha	Satish	सुधा	Linguistic Hedges with examples
21	21305081021	Takeshwar	Padam Lal	Takeshwar	Fuzzy control and fuzzy expert
22	21305081022	Tripti	Rajendra kumar	[signature]	Fuzzification and defuzzification.
23	21305081023	VANDANA DEWANGAN	PRAKASHCHAND	Vandana	Multiconditional Approximate Reasoning

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HOD

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MSc - 4 Sem

Paper (III) - Operation Research II

SN.	Roll. No.	Student's Name	Father's Name	Sign
1	2130502l001	Aarti	kehar singh	Aarti
2	2130508l002	CHITRANSHI	MAHADEO	Chitranshi
3	2130508l003	Deepa Verma	Mohan lal	Dv.
4				
5				
6				
7	2130508l007	Laxmikant	Nitram	
8	2130508l008	Mamta Sahu	Tilochan Sahu	Mahu
9	2130508l009	Neha Verma	Suresh kumar	Neha
10	2130508l010	Pallavi Barsiker	[illegible]	Pallavi Barsiker
11	2130508l011	Parmeshwari	Ramprasad	Pinki
12	2130508l012	Piyush kumar	Suresh kumar	Piyush
13	2130508l013	Pooja Nishad	Meghnath	Pooja
14	2130508l014	Pragati Yadav	Radheshyam	Pragati
15	2130508l015	Preeti	Parasram	Preeti
16	2130508l016	Rishikendra Ram	Anand Kumar	Rishi
17	2130508l017	Shailee Sahu	Devcharan Sahu	Shailee
18	2130508l018	Shilvee Devanga	Dinesh Devanga	Shilvee
19	2130508l019	Shweta Sahu	Jayprakash sahu	Shweta
20	2130508l020	Sudha	Satish	Sudha
21	2130508l021	Takeshwari	Padum lal	Takeshwari
22	2130508l022	Tripti	Rajendra kumar	Tripti
23	2130508l023	VANDANA DEWANGAN	PRAKASH CHAND	Vandana

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Topic

Dynamic programming problem.
Integer programming problem.
classification of queueing model.

probility distribution and queuing system
linear programming problem
Branch and Bound method
Non linear programming
Non linear programming one and multivariable
Mixed integer linear programming
Dynamic programming
Games with mixed strategies
Deterministic. Queuing system.
waiting line model / queuing theory
Dominace Rules.
Integer programming, Branch and bound technique
Zero sum game
Quadratic programming.
kuhn - Tucker condition
Lagrange multiplier method
Quadratic programming problem.

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Paper(V). Graph theory-II

Sr.	Roll No.	Student's Name	Father's/Mo.	Sign	Topic
1	2130508 1001	Aarti	Kehar singh	Aarti	Network flow, Definition and theorem.
2	2130508 1002	CHITRAKANTAN	MAHADEV	Chitrakanta	Menger's Theorem's
3	2130508 1003	Dupeshwari	Mohan Lal		Max flow min-cut theorem.
4					
5					
6					
7	2130508 1007	Laxmi Nayak	Nirmani		digraph connectivity & Distance concept
8	2130508 1008	Mamta Sahu	Tilochan Ram	Mamta	Chromatic polynomial
9	2130508 1009	Neha verma	Suresh kumar	Neha	diagraph tournament strong and weak diagraph
10	2130508 1010	Pallavi Barchha	Chandrashekhar	Pallavi Barchha	Bivariate Colouring polynomial of Tutted dichromatic
11	2130508 1011	Parmeshwari	Ramprasad		Ramsay Theory and Ramsay Number of some
12	2130508 1012	Piyush kumar	Suresh kurrey		Ramsey Number & Ramsey theory
13	2130508 1013	Pooja Nishad	Prabhnath		chromatically unique graph
14	2130508 1014	Pragati Yadav	Radheshyam yadav		automorphism groups & properties and Example
15	2130508 1015	Preeti	Parasram		~~Ramsay Number and Ramsay graphs~~ Automorphism group Properties and Ex.
16	2130508 1016	Pushpendra Kumar	Nand kum		Co-chromatics (dichromatics) graph
17	2130508 1017	Shailee Sahu	Devcharan Sahu		Co-chromatic graphs and chromatically Unique graph
18	2130508 1018	Shilvee Dewangan	Dinesh Dewangan		Degree Sequence
19	2130508 1019	Shweta Sahu	Jayprakash sahu		Perfectness preserving operations
20	2130508 1020	Sudha	Satish		Forbidden subgraph
21	2130508 1021	Tekeshwari	Padum Lal		Symmentry carcest · pseudo-similar
22	2130508 1022	Tripti	Rajendra kumar		spectral studies of the automorphism.
23	2130508 1023	VANDANA DEWANGAN	PRAKASH CHAND		Connectedness in connected graph.

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M.Sc. II Sem (20 - 23) Project Copy Submitted

Paper - I (Advanced Abstract Algebra - II)

S.No.	Roll No.	Name of Students	Father Name	Sign
01	2330508[illegible]	Anamika Jena	Amitabh Jena	
02	233050810002	Digeshwar Kumar	Ramm singh	
03				
04	233050810004	Kanchan Dewangan	Nutanlal	Kanch
05	233050810005	Khushi chandrakar	Amarsingh	Khushi
06	233050810006	Krishna Kumar	tularam	
07				
08	233050810008	Lokeshparanand	Ramanand	
09	233050810009	Mohnish	Ishu Kumar	
10	233050810010	Neelima Patel	Ramgulal	Neelima
11	233050810011	Nikita Dewangan	Virendra	Nikita
12	233050810012	Pragati Sahu	Leela Ram	Pragati
13	233050810013	Prashant Kumar Sahu	Leela Ram	
14	233050810014	Pratima Sethi	Balkrishna	Pratima
15	233050810015	Ritu Sahu	Mr. Babulal Sahu	Ritu
16	233050810016	Rupesh Dewangan	Jeeharam	Rupesh
17	233050810017	Tamesh Sahu	Kanwal Singh	
18	233050810018	Vaseem Qureishi	Shamim Qureishi	Vaseem

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Class. M.Sc. II sem (Maths) 25/04/23

Name of the topics

Noetherian and Artinian module.
linear transformation

Noether - Lasker Theorem
Invariant subspace
finitely generated modules over a PID.

Module - cyclic modules simple modules
Smith normal form over a PID and rank.
Free - Modules.
Hilbert basis Theorem
Nilpotent Transformation
Decomposition theorem
Fundamental structure theorem for finitely generated modules over Jordan Canonical form
Wedderburn - Artin Theorem
Rational Canonical form

Mantel Cartheodory Theorem and the great picard theorem

The primary Decomposition

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(73) MSc - II Sem

Paper - II (Real Analysis - II)

S.No.	Roll No.	Name of Students	Fathers Name	Sign
01	233050810001	Anamika Jena	Amitabh Jena	Anamika
02	233050810002	Bijeshwari Kumari	Ramam Singh	[illegible]
03				
04	233050810004	Kanchan	Nutan Lal	Kanch
05	233050810005	Khushi	Amarsingh	Khushi
06	233050810006	Krishna Kumar	Tularam	Sahu
07				
08	233050810008	Lokeshwaranand	Ramanand	Sahu
09	233050810009	Mohnish	Ishu Kumar	मोहनीश
10	233050810010	Neelima	Ramgulal Patel	Neelima
11	233050810011	Nikita Dewangan	Virendra	Nikita
12	233050810012	Pragati Sahu	Leela Ram	Pragati
13	233050810013	Prashant Kumar Sahu	Leela Ram	Sahu
14	233050810014	Pratima	Balkrishna	Pratima
15	233050810015	Ritu Sahu	Mr. Babu lal Sahu	Ritu
16	233050810016	Rupesh Dewangan	Darha ram	Rupesh
17	233050810017	Temesh Sahu	Kanwal singh	Sahu
18	233050810018	Waseem Quraishi	Shamim Quraishi	Waseem

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(74)

Topics

- Extension of Measure uniqueness of extension.
- Integration and differentiation. The fundamental theorem of calculus.
- Compactness of L^p Thm. Converges in Measure.
- Borel And measurable of sets
- Rectifiable Curves
- Lebesgue outer measure
- Non Measurable Sets
- Measures and Outer measures.
- The L^p-spaces, convex fun^n, Jensen's inequality.
- Integral of non negative Measurable Function
- Function of Bounded variation
- The General Integral
- Properties of integer
- Reimann Stieltjes Integral
- Measure space Integration with respect to measure
- Four derivitive, Lebesgue differential theorem.

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M.Sc. II Sem

paper-III (Topology-II)

S.No.	Roll No.	Name of Students	Fathers Name	Sign
01	23305081000l	Anamika Jena	Amiteshh	Anamika
02	233050810002	Digeshwar Kumar	Raman singh	Digeshwar
03				
04	233050810004	kanchan	Nutanlal	kanchan
05	233050810005	Khushi	Amarsingh	Khushi
06	233050810006	Krishna Kumar	Tularam	Sahu
07				
08	233050810008	Lokesh	Ramanand	Sahu
09	233050810009	Mohnish	Ishu Kumar	Mohnish
10	230508100 10	Neelima Patel	Ramgulal	Neelima
11	23050810011	Nikita Dewangan	Virendra	Nikita
12	233050810012	Pragati Sahu	Leela Ram	Pragati
13	233050810013	Prashant Kumar Sahu	Leela Ram	Sahu
14	233050810014	Pratima	Balkrishna	Pratima
15	233050810015	Ritu sahu	Mr. Babulal Sahu	Ritu
16	233050810016	Rupesh Dewangan	Derha ram	Rupesh
17	233050810017	Tonesh Sahu	Kanwal Singh	Tonesh
18	233050810018	Vaseem Qureshi	Shamim Qureshi	Vaseem

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Topics

Ultra filter & compactness
Product space, countability in product space

Para - Compactness, The Smirnov Metrization Th^m.
Nagata Smirnov metrization theorem
Product spaces, separation axioms-connectedness

Embedding lemma and Tychonoff embedding
Continuity and connectedness
Filter's Their Convergence.
The fundamental group & covering space, Homotopy of Paths
Net and Filter
Compactness
Hausdroffness and nets
The projection mapping
Tychonoff Product topology
The fundamental group, covering spaces
Fundamental theorem of Algebra.

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Msc II Sem

Paper - IV (Complex Analysis - II)

S.No.	Roll No.	Name of Students	Father's Name	Sign
01	233050810001	Anamika	Amitabh	Anamika
02	233050810002	Dijeshwar Kumar	Raman Singh	
03				
04	233050810004	Kanchan	Nutanlal	Kanchan
05	233050810005	Khushi	Amarsingh	Khushi
06	233050810006	Krishna Kumar	Tularam	Sahu
07				
08	233050810008	Lokeshwaranand	Ramanand	Sahu
09	233050810009	Mohnish	Ishu Kumar	Mohnish
10	233050810010	Neelima Patel	Ramgulal Patel	Neelima
11	233050810011	Nikita Dewangan	Virendra	Nikita
12	233050810012	Pragati Sahu	Leela Ram	Pragati
13	233050810013	Prashant Kumar	Leela Ram	Sahu
14	233050810014	Pratima Sahu	Balkrishna	Pratima
15	233050810015	Ritu Sahu	Mr Babulal Sahu	Ritu
16	233050810016	Rupesh Dewangan	Jeeharam	Rupesh
17	233050810017	Tenesh Sahu	Kanwal Singh	Tenesh
18	233050810018	Vaseem Qureshi	Shamim Qureshi	Vaseem

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Topics:

Blash Theorem.
Hadamard factorization theorem
Schwarz's Reflection Principal
1/4 Theorem
Jensen formula Poison Jensen formula
Runge's Theorem Mittag Leffler theorem
Univalent Functions
Monodromy Theorem and its Consequences.
Riemann zeta function
Harmonic function And Harnack's Theorem
Little Picard
Gamma function
Mortel Cartheodory Theorem and the great picard Theorem
Schottky's theorem
Borel's Theorem
The Weierstrass factorization theorem.

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M.Sc - II Sem

Paper - II (Adv. Discrete Mathematics)

S.No.	Roll No.	Name of Students	Father's Name	Sign
01	23305081001	Anumika	Anirudh	Anumika
02	23305081002	Digeshwar Kumar	Raman singh	[illegible]
03	Absent sinha			
04	23305081004	Kanchan	Nilambar	Kanchan
05	23305081005	Khusi	Amarsingh	Khusi
06	233050810006	Krishna Kumar	Tulsiram	Sahu
07	Absent			
08	23305081008	Lokeshwar Anand	Ramanand	Sahu
09	233050810009	Mohnish	Ishu Kumar	मोहनिश
10	233050810010	Neelima Patel	Ramgulal Patel	Neelima
11	233050810011	Nikita Dewangan	Virendra	Nikita
12	233050810012	Pragati Sahu	Leelaram	Pragati
13	233050810013	Prashant kumar Sahu	Leela Ram	Sahu
14	233050810014	Pratima	Balkrishna	Pratima
15	233050810015	Ritu sahu	Mr. Babu lal sahu	Ritu
16	233050810016	Rupesh	Dorha ram	Rupesh
17	233050810017	Temesh	Kanwal singh	[illegible]
18	233050810018	Vaseem Qureshi	Shamim Qureshi	Vaseem

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Topics

Directed Graph & Indegree Outdegree of vertex
Finite machine, definition, example, making transition diagram from transition table
Finite state Machine of Transition Table.
Minimum spanning tree travelling salesman problem
tree, spanning tree, cut set, MST, Kruskal Algorithm
Weighted undirected graph chinese postman problem
Equivalence of FSM, Examples, Reduced of FSM Ex. on it.
Equivalence of FSM, Minimization of FSM,
Walk, Path and circuits, special & operation graph Ex.
Finite state machine Equivalence of FSM Home.
Graph Theory
Planar graph and its properties complete etc
finite automata moore machine change from moore machine to mealy machine
DFA and NDFA Transition table
Matrix representation of directed and Undirected graph
Melay & Moore Machine.

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