

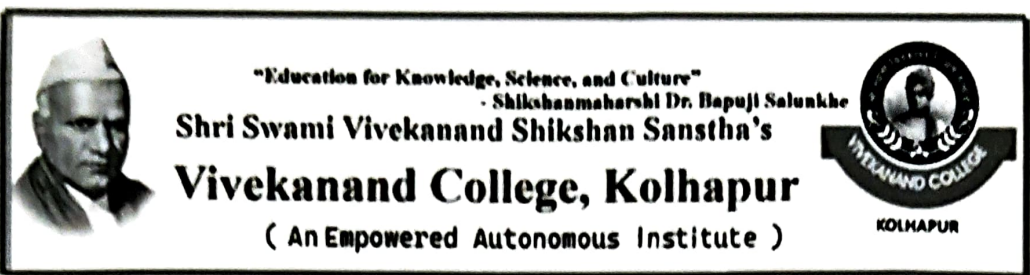
DEPARTMENT OF MATHEMATICS

INDEX

CO-PO-PSO Attainment of B.Sc. III 2024-25

Sr. No.	Title
1.	CO-PO_-PSO Attainment Verification
2.	POs and PSOs
3.	Course Outcome of Courses
4.	Articulation Matrix
5.	Students Marklist
6.	Students Feedback Form





DEPARTMENT OF MATHEMATICS

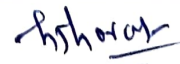
B.Sc. I/II/III

CO-PO-PSO Attainment verification 2024-25

CO attainment verification:

Sr. No.	Course Name	Course Code	CO Target	CO Attainment	Fully attained or not
1	Calculus, Algebra and Geometry	DSC-1003A	3	1.8	Satisfactorily attained
2	Multivariable Calculus and Ordinary Differential Equation	DSC-1003B	3	1.2	Not attained
3	Number Theory and Integral Calculus	DSC-1003C	3	1.6	Partially attained
4	Discrete Mathematics and Integral Transform	DSC-1003D	3	2	Satisfactorily attained
5	Real Analysis	DSC-1003E1	3	2	Satisfactorily attained
6	Modern Algebra	DSC-1003E2	3	2.6	Highly attained
7	Matrix Algebra	DSC-1003E3	3	1	Not attained
8	Numerical Methods I	DSC-1003E4	3	1.8	Satisfactorily Attained
9	Metric Spaces and	DSC-1003F1	3	2	Satisfactorily attained
10	Linear Algebra	DSC-1003F2	3	1.2	Not attained
11	Complex Analysis and	DSC-1003F3	3	2.6	Highly attained
12	Numerical Methods II	DSC-1003F4	3	1	Not attained




 (Dr. S. P. Thorat)
 HEAD
 DEPARTMENT OF MATHEMATICS
 VIVEKANAND COLLEGE, KOLHAPUR
 (EMPOWERED AUTONOMOUS)

PO verification:

PO	Attainment	Level
P01	1.733	Good
P02	1.721	Good
P03	1.749	Good
P04	1.747	Good
P05	1.757	Good
P06	1.755	Good
P07	1.734	Good

PSO verification:

PSO	Attainment	Level
PS01	1.712	Good
PS02	1.733	Good
PS03	1.756	Good
PS04	1.720	Good
PS05	1.756	Good



hshorath
(Dr. S. P. Thorat)
HEAD
DEPARTMENT OF MATHEMATICS
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

Vivekanand College, Kolhapur (An Empowered Autonomous Institute)

Department of Mathematics

CO/PO/PSO attainment calculation

B.Sc. I/II/III

(Year 2024-2025)

Program Outcomes

- PO 1: Knowledge of Disciplines: Demonstrate the fundamental practical and theoretical understanding and conceptual knowledge of all the disciplines in physical sciences prescribed.
- PO 2: Problem solving skills: Think and evaluate critically, analyse complex situations and provide solutions to problems using scientific methodology; thus relating the acquired knowledge to day to-day life.
- PO 3: Research aptitude: Cultivate a liking for research; and apply the related skills and scientific temper in order to carry out research work that benefits the surrounding community and industry.
- PO 4: Professional and soft skills: Function independently and collaboratively to achieve the work-place goals through successful relations and mannerisms.
- PO 5: Environment and Sustainability: Possess empathetic awareness towards environment and focus on sustainable social development while conducting research and scientific studies.
- PO 6: Cultural ethics: Act in ethically righteous manner in planning, conducting and communicating the research and always keep in mind the cultural ethos of our society.
- PO 7: Citizenship: Perform their roles as cultured and civilized citizens possessing human values, creativity, positivity and engaged in nation-building.

Program Specific Outcomes

- PSO1 : Enabling students to develop a positive attitude towards mathematics as an interesting and valuable subject of study.
- PSO2 : Acquire good knowledge and understanding advanced areas of mathematics chosen by students from given course.
- PSO3 : Students should be able to recall basic facts about mathematics and train the students to extract information, formulate and solve problems in systematic and logical manner.



PSO4 : Students will learn numerical aptitude applying both qualitative and quantitative knowledge for their further career.

PSO5 : Students learn how to apply mathematical concepts to practical and real-life problems.

Course I: Calculus, Algebra and Geometry (DSC -1003A)

CO1: Calculate the limit and examine the continuity of a function at a point.

CO2: Understand the consequences of various mean value theorems for differentiable functions.

CO3: Sketch curves in Cartesian and polar coordinate systems.

CO4: Calculate the radius of curvature of circle in parametric and cartesian form

CO5: Familiarize with relations, equivalence relations and partitions.

CO6: Employ De Moivre's theorem in a number of applications to solve numerical problems.

CO7: Recognize consistent and inconsistent systems of linear equations by the row echelon form of the augmented matrix, using rank.

CO8: Understand various equation form of sphere.

Course II: Multivariable Calculus & Ordinary Differential equations (DSC -1003B)

CO1: Learn conceptual variations while advancing from one variable to several variables in calculus.

CO2: Apply multivariable calculus in optimization problems.

CO3: Applications of multivariable calculus tools in physics, economics, optimization, and understanding the architecture of curves and surfaces in plane and space etc.

CO4: Calculate extreme value of function of two variable by various method.

CO5: Learn various techniques of getting exact solutions of solvable first order differential equations and linear differential equations of higher order.

CO6: Know Picard's method of obtaining successive approximations of solutions of first order differential equations, passing through a given point in the plane and Power series method for higher order linear equations.

CO7: Formulate mathematical models in the form of ordinary differential equations to suggest solutions of the day to day problems arising in physical, chemical & biological disciplines.

CO8: Learn various technique of solving Clairaut's equation.



Course III: Number Theory and Integral Calculus (DSC-1003C)

CO1: Use mathematical induction and understand the logic and methods behind the major proofs in Number Theory.

CO2: Describe the method of solving the linear Diophantine equation

CO3: Determine GCD and LCM by using the Euclidean algorithm.

CO4: Understand the definition of congruence and be familiar with number theoretic functions

CO5: Acquire the information about beta, gamma function and evaluate it in various problems

CO6: Apply Leibnitz rule for differential under integral sign

CO7: Learn definition of Fourier Series, Odd and Even Functions, Half range series.

CO8: Use the knowledge of double and triple integrals for finding area and volume

Course IV: Discrete Mathematics and Integral Transform (DSC-1003D)

CO1: Understand Recurrence Relation, Generating functions and solving problems involving recurrence equations.

CO2: Understand basic concept of graph theory to apply in various fields.

CO3: Formulate Recurrence Relations to solve problems involving an unknown sequence.

CO4: Familiarize with the types of graphs, types of paths and their properties

CO5: recognize the different methods of finding Laplace transforms and Fourier transforms of different functions.

CO6: explain the applications and the usefulness of these special functions.

CO7: Determine Fourier transform, Relation between Laplace and Fourier Transform.

CO8: apply the knowledge of Laplace transforms, Fourier transforms and Finite Fourier transforms in finding the solutions of differential equations

Course V: Real Analysis (DSC-1003E1)

CO1: Recognize bounded, convergent, divergent, Cauchy and monotonic sequences and to calculate their limit superior, limit inferior, and the limit of a bounded sequence.

CO2: Use the ratio, root, alternating series and limit comparison tests for convergence and absolute convergence of an infinite series of real numbers.

CO3: Understand some of the families and properties of Riemann integrable functions, and the applications of the fundamental theorems of integration.

CO4: Solve Riemann integral and improper integral



Course VI: Modern Algebra (DSC-1003E2)

CO1: Recognize the mathematical objects that are groups, and classify them as abelian, cyclic and permutation groups, etc.

CO2: Explain the significance of the notion of cosets, normal subgroups, and factor groups

CO3: The fundamental concept of Rings, Fields, subrings, integral domains and the corresponding Homomorphisms.

CO4: Apply fundamental theorem, Isomorphism theorems of groups to prove these theorems for Ring.

Course VII: Matrix Algebra (DSC-1003E3)

CO1: Understand the concept of formation of partial differential equation.

CO2: Understand the classification of partial differential equations.

CO3: Understand the Geometrical meaning of partial differential equation and method of solutions.

CO4: Understand transformation equations and its applications.

Course VIII: Numerical Methods I (DSC-1003E4)

CO1: Learn about various interpolating methods to find numerical solutions.

CO2: Demonstrate the use of interpolation methods to find intermediate values in given graphical and/or tabulated data.

CO3: Use of numerical differentiation and integration

CO4: Learn to find the solution of ordinary differential equation by Euler, Taylor and Runge-Kutta methods

Course IX: Metric Spaces (DSC-1003F1)

CO1: Acquire the knowledge of notion of metric space, open sets and closed sets.

CO2: Demonstrate the properties of continuous functions on metric spaces

CO3: Apply the notion of metric space to continuous functions on metric spaces.

CO4: Understand the basic concepts of connectedness, completeness and compactness of metric spaces.



Course X: Linear Algebra (DSC-1003F2)

CO1: Understand the concepts of vector spaces, subspaces, bases, dimension and their properties.

CO2: Learn properties of inner product spaces and determine orthogonality in inner product spaces.

CO3: Learn basic concepts of linear transformation, dimension theorem, matrix representation of a linear transformation, and the change of coordinate matrix.

CO4: Familiarize characteristic roots and characteristic vectors.

Course XI: Complex Analysis (DSC-1003F3)

CO1: Understand the significance of differentiability of complex functions leading to the understanding of Cauchy-Riemann equations.

CO2: Understand the exponential function, Logarithmic function, Trigonometric function.

CO3: apply Cauchy integral formula to evaluate integrals.

CO4: Represent functions as Taylor, power and Laurent series, classify singularities and poles, find residues and evaluate complex integrals using the residue theorem.

Course XII: Optimization Techniques (DSC-1003F4)

CO1: Analyse and solve linear programming models of real life situations.

CO2: Formulate and apply suitable methods to solve problems;

CO3: Identify and select procedures for various sequencing, assignment, transportation problems.

CO4: Model competitive real-world phenomena using concepts from game theory and analyse pure and mixed strategy games.

Articulation Matrix for

COURSE I: DSC1003A

Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	2	1	1	1	1	2	1	2	3	1
CO2	4	4	2	1	1	1	1	3	1	1	2	1
CO3	4	4	1	1	1	1	2	2	1	1	3	1
CO4	3	4	2	1	1	1	1	1	1	2	3	11
CO5	3	3	1	2	1	1	1	3	1	1	3	1
CO6	3	3	1	1	1	1	1	3	1	1	2	1
CO7	4	3	1	1	1	1	1	1	1	2	2	1
CO8	4	3	1	2	1	1	1	1	1	1	3	1
Average	3.5	3.375	1.375	1.25	1	1	1.125	2	1	1.375	2.625	2.25



COURSE I: DSC1003B

Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	4	2	2	1	1	1	2	1	2	2	1
CO2	4	3	2	1	1	2	2	3	1	2	3	1
CO3	4	4	1	1	1	1	2	3	1	2	3	1
CO4	3	3	1	1	1	1	1	2	1	2	2	1
CO5	4	4	2	2	1	1	1	2	1	1	3	1
CO6	3	3	2	1	1	1	1	3	1	2	3	1
CO7	3	4	2	1	1	1	1	1	1	1	2	1
CO8	3	3	2	1	1	1	1	1	1	1	2	1
Average	3.375	3.5	1.75	1.25	1	1.125	1.25	2.125	1	1.625	2.5	1

COURSE III: DSC1003C

Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	2	1	1	1	2	2	1	1	2	1
CO2	4	4	1	2	1	1	1	3	1	1	2	1
CO3	4	4	1	1	1	1	1	2	1	1	2	1
CO4	4	4	1	1	1	1	1	3	1	1	1	1
CO5	4	3	1	1	1	1	1	1	1	1	2	1
CO6	4	3	2	1	1	1	1	1	1	1	1	1
CO7	3	3	2	2	1	1	1	1	1	1	2	1
CO8	3	3	2	1	1	1	1	1	1	1	2	1
Average	3.625	3.375	1.5	1.25	1	1	1.125	1.75	1	1	1.75	1

COURSE IV: DSC1003D

Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	4	2	2	1	1	2	3	1	1	2	1
CO2	3	4	2	1	1	1	2	2	1	1	2	1
CO3	4	4	3	1	1	1	1	2	1	1	1	1
CO4	3	4	3	1	1	1	1	2	1	1	1	1
CO5	4	3	2	1	1	1	1	1	1	1	2	1
CO6	4	3	2	1	1	1	1	1	1	1	2	1
CO7	4	3	2	1	1	1	1	1	1	1	1	1
CO8	4	3	3	1	1	1	1	1	1	1	2	1
Average	3.625	3.5	2.375	1.125	1	1	1.25	1.625	1	1	1.625	1

COURSE V: DSC1003E1

Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	4	3	3	2	1	1	1	2	1	3	2	1
CO2	4	3	2	1	1	2	1	2	1	1	3	1
CO3	3	3	3	1	1	1	1	1	1	2	1	1
CO4	4	3	2	2	1	1	1	1	1	1	1	1
Average	3.75	3	2.5	1.5	1	1.25	1	1.5	1	1.75	1.75	1

COURSE V: DSC1003E2

Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	4	3	2	1	1	1	2	1	1	2	2
CO2	4	4	2	1	1	1	1	1	1	1	2	1
CO3	4	4	2	1	1	1	1	1	1	2	2	1
CO4	3	3	2	1	1	1	1	2	1	2	1	1
Average	3.5	3.75	2.25	1.25	1	1	1	1.5	1	1.5	1.75	1.25



COURSE VII: DSC1003E3

Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	4	3	1	1	1	1	3	1	1	2	1
CO2	3	4	2	1	1	1	1	2	1	1	1	1
CO3	4	4	3	1	1	1	1	2	1	1	2	1
CO4	4	4	2	2	1	1	1	3	1	1	2	1
Average	3.5	4	2.5	1.25	1	1	1	2.5	1	1	1.75	1

COURSE VIII: DSC1003E4

Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	2	1	1	1	2	1	1	2	1
CO2	4	3	3	2	2	1	1	3	1	1	1	1
CO3	4	3	2	1	1	1	1	2	1	1	1	1
CO4	4	3	2	1	1	1	1	2	1	1	2	1
Average	3.75	3	2.5	1.5	1.25	1	1	2.25	1	1	1.5	1

COURSE IX: SC1003F1

Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	4	3	2	2	1	1	2	1	1	2	1
CO2	3	4	3	1	1	2	1	3	1	1	1	1
CO3	4	4	2	1	1	1	1	2	1	1	2	1
CO4	4	3	3	1	1	1	1	2	1	1	2	1
Average	3.5	3.75	2.75	1.25	1.25	1.25	1	2.25	1	1	1.75	1

COURSE X: DSC1003F2

Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	4	2	2	1	1	1	3	1	1	1	1
CO2	4	3	2	2	1	1	1	2	1	1	2	1
CO3	4	3	3	2	1	1	1	1	1	1	2	1
CO4	4	3	2	1	1	1	2	1	1	1	1	1
Average	3.75	3.25	2.25	1.75	1	1	1.25	1.75	1	1	1.5	1

COURSE XI: SC1003F3

Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	4	3	3	1	1	1	1	3	1	1	2	1
CO2	3	3	2	2	2	1	1	2	1	1	1	1
CO3	3	3	3	2	1	2	2	1	1	1	2	1
CO4	3	4	2	2	1	1	1	2	1	1	1	1
Average	3.25	3.25	2.5	1.75	1.25	1.25	1.25	2	1	1	1.5	1

COURSE XII: SC1003F4

Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	4	3	3	1	1	1	1	2	1	1	2	1
CO2	3	4	3	1	1	1	1	1	1	1	1	1
CO3	3	4	2	1	1	1	1	2	1	1	2	1
CO4	3	4	2	2	1	1	1	1	1	1	1	1
Average	3.25	3.75	2.5	1.25	1	1	1	1.5	1	1	1.5	1



Semester			Sem I			Sem II			Sem III			Sem IV			Sem V												Sem VI																						
Course Code			DSC-1003A			DSC-1003B			DSC-1003C			DSC-1003D			DSC-1003E1				DSC-1003E2				DSC-1003E3				DSC-1003E4				DSC-1003F1				DSC-1003F2				DSC-1003F3				DSC-1003F4						
			CI	C	A	CI	C	A	CI	C	A	CI	C	A	CI	C	A	CI	C	A	CI	C	A	CI	C	A	CI	C	A	CI	C	A	CI	C	A	CI	C	A	CI	C	A								
Sr. No.	ROLL NO.	Name of student	25	60	28	63	30	63	30	68	14	33	15	29	15	32	15	29	15	32	15	29	15	32	15	29	7	30	10	24	13	28	8	17															
1	8249	ARDALKAR ADITYA ASHOK																																															
2	8250	BHOGAM SUJATA KRISHNAT	17	29	19	36	20	29	25	58	13	25	13	25	13	22	15	24	15	22	15	24	15	22	15	24	10	30	14	30	15	32	11	27															
3	8251	BHOSALE AASHA SADIK	25	38	22	38	11	28	39	28	13	27	15	12	13	19	15	16	16	15	19	15	16	15	16	10	14	10	22	13	23	10	24																
4	8252	CHOUGULE PRATEEK ANIL	19	52	13	45	12	25	25	43	10	24	10	18	12	24	12	24	12	24	12	24	12	24	12	24	9	22	10	26	11	33	8	23															
5	8253	CHOUGULE VISHAKHA MAHADEV	19	29	19	35	22	25	19	28	11	27	12	17	15	27	12	17	12	17	12	17	12	17	12	17	8	13	9	26	13	26	10	21															
6	8254	GANBAVALE TEJAS SANTOSH	27	35	18	45	17	53	30	62	12	28	11	22	14	29	13	22	13	22	13	22	13	22	13	22	12	31	11	30	12	34	12	32															
7	8255	JADHAV SHRIDHAR SUHAS	26	36	28	70	30	55	30	70	15	34	15	33	14	33	15	35	15	35	15	35	15	33	14	33	15	33	15	30	15	33	14	35															
8	8256	KALAKE ABHIJEET LAXMAN	25	58	21	61	27	49	30	67	14	31	15	33	14	24	15	29	15	29	15	29	14	24	15	29	15	33	14	33	15	35	13	35															
9	8257	KALAMKAR SANIKA JAYVANT	23	49	21	57	25	51	30	53	15	34	15	29	14	34	15	32	15	32	15	32	14	34	15	32	11	35	12	27	15	33	14	33															
10	8258	KAMBLE AVISHKAR SUDESH	25	60	30	60	30	60	30	70	15	34	15	33	15	34	15	30	15	30	15	30	15	34	15	34	15	35	15	34	15	35	15	35															
11	8259	MORE PRANALI ASHOK	21	29	22	25	13	35	25	35	13	35	14	18	14	30	14	22	14	22	14	22	14	30	14	22	7	19	11	26	13	21	7	24															
12	8260	PATIL ARPITA JINESHWAR	29	61	28	64	30	62	27	69	15	35	15	31	15	34	15	35	15	35	15	35	15	34	15	35	13	35	11	31	15	33	14	26															
13	8261	SAJINKAR DIVYA NETAJI	20	47	20	68	20	71	20	76	11	15	14	20	14	16	12	22	12	22	12	22	16	15	12	22	13	27	12	16	15	28	11	30															
14	8262	VADICHARLA SANDHYA KRUSHNAMURTI	16	66	20	73	14	40	20	41	15	35	15	33	15	29	12	34	12	34	12	34	15	29	12	34	14	30	15	33	15	33	15	35															



Feed Back Form Questions

- Q1. How do you rate the syllabus of the courses that you have studied in relation to the capability expected out of the course?
- Q2. How do you rate the usefulness of the units in the syllabus relevant to the course?
- Q3. How do you rate the weightage of the credits to the courses
- Q4. How do you rate the offering of electives in terms of their quality to the specialization stream?
- Q5. How do you rate the electives offered in relation to technological advancements?
- Q6. Rate the size of the syllabus in terms of the load of the students.
- Q7. Rate the courses in terms of self-learning considering the design of the courses.
- Q8. How do you rate the evaluation scheme designed for each of the courses?
- Q9. How do you rate the objectives stated for each of the course?
- Q10. How do you rate the percentage of the courses having lab components?



B.Sc.I (DSC -1003A): Calculus, Algebra and Geometry

		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1	8249	3	4	4	4	4	4	4	3	4	4
2	8250	4	4	5	4	5	3	3	3	3	5
3	8251	4	2	3	4	3	4	4	2	4	4
4	8252	5	4	5	4	5	5	4	4	5	5
5	8253	5	5	4	5	4	5	5	5	5	5
6	8254	5	5	5	5	5	5	5	5	5	5
7	8255	4	5	5	4	3	2	3	5	4	4
8	8256	4	5	3	5	4	4	5	5	4	3
9	8257	4	3	5	3	2	5	4	4	4	5
10	8258	5	4	4	5	5	5	4	4	3	5
11	8259	4	5	3	3	4	3	2	4	4	5
12	8260	4	4	5	5	4	5	4	5	4	3
13	8261	5	4	5	5	4	5	4	3	4	3
14	8262	4	5	5	3	5	4	3	5	4	4

B.Sc. I-(DSC-1003B): Multivariable Calculus and Ordinary Differential equations

		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1	8249	3	4	4	3	4	3	4	4	3	3
2	8250	4	2	5	3	2	1	3	3	2	5
3	8251	4	4	5	4	5	4	3	3	3	3
4	8252	4	4	3	5	4	5	3	5	4	5
5	8253	5	5	5	5	5	5	4	4	5	4
6	8254	5	5	5	5	4	4	5	5	5	5
7	8255	4	3	4	4	4	3	4	4	4	4
8	8256	5	5	5	5	5	5	5	5	5	5
9	8257	3	4	3	4	4	3	3	4	3	2
10	8258	4	5	5	5	5	4	3	4	4	5
11	8259	5	4	5	4	5	4	4	5	3	3
12	8260	5	4	5	3	4	5	3	2	5	4
13	8261	5	4	5	4	4	5	4	5	4	3
14	8262	4	5	4	3	2	5	5	4	4	5

B.Sc.II (DSC-1003C): Number Theory and Integral Calculus

		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1	8249	3	4	3	4	3	4	3	4	3	4
2	8250	4	5	3	4	5	4	4	3	2	5
3	8251	4	4	4	3	4	3	4	4	3	3
4	8252	4	5	4	5	4	4	3	3	5	5
5	8253	5	5	5	4	4	4	5	5	4	4
6	8254	5	5	5	5	5	5	5	5	4	5
7	8255	5	5	5	5	5	5	5	5	5	5
8	8256	4	3	4	3	3	4	4	3	3	3
9	8257	4	3	4	4	4	4	3	4	3	3
10	8258	4	5	4	4	5	5	4	4	5	4
11	8259	5	5	4	4	4	4	4	5	5	5
12	8260	4	3	5	4	3	5	5	3	4	3
13	8261	5	4	4	4	5	4	5	5	5	4
14	8262	5	3	4	4	4	5	3	5	5	5



B.Sc.-II (DSC-1003D): Discrete Mathematics and Integral Transform

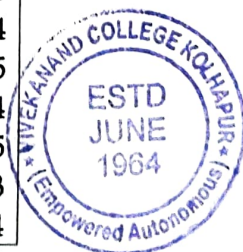
		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1	8249	5	2	5	4	5	3	4	5	4	5
2	8250	4	3	3	4	5	4	4	3	3	3
3	8251	5	5	3	4	2	3	5	3	4	3
4	8252	3	4	3	4	3	4	3	4	3	4
5	8253	5	4	4	5	5	4	5	4	5	5
6	8254	5	5	5	5	5	5	5	4	5	4
7	8255	4	3	4	3	3	4	4	5	4	5
8	8256	5	5	5	5	5	5	5	5	5	5
9	8257	5	4	5	5	4	5	5	3	3	4
10	8258	5	4	5	5	5	5	4	4	4	4
11	8259	5	4	5	3	5	2	5	5	5	4
12	8260	5	4	4	5	4	3	3	3	3	3
13	8261	3	5	4	3	5	2	5	5	4	4
14	8262	5	4	4	5	4	5	5	5	5	4

B.Sc.III (DSE-1003E1): Real Analysis

		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1	8249	5	4	3	5	3	3	5	3	3	5
2	8250	3	4	3	4	3	4	3	4	4	4
3	8251	4	5	3	5	2	5	2	5	4	5
4	8252	5	5	5	5	5	5	5	5	5	5
5	8253	5	4	5	5	4	5	4	5	5	5
6	8254	3	3	4	4	3	3	3	4	4	3
7	8255	5	5	5	5	5	5	5	5	5	5
8	8256	5	5	5	4	4	3	3	2	2	4
9	8257	5	4	5	4	5	4	5	4	5	4
10	8258	5	3	4	4	2	5	4	5	5	4
11	8259	5	4	5	4	5	4	4	4	4	3
12	8260	3	4	5	4	4	5	3	5	5	4
13	8261	5	4	5	4	4	4	4	4	5	4
14	8262	5	4	5	4	4	5	4	4	3	4

B.Sc.III (DSE-1003E2): Modern Algebra

		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1	8249	4	4	3	3	5	4	3	3	2	4
2	8250	3	4	3	4	3	3		3	4	4
3	8251	4	3	4	3	5	3	5	3	5	5
4	8252	5	5	5	4	5	4	4	5	5	5
5	8253	5	5	5	5	5	4	5	5	5	5
6	8254	4	4	4	4	4	4	4	4	4	5
7	8255	5	5	5	5	5	5	5	5	5	5
8	8256	4	4	5	4	5	5	3	4	3	5
9	8257	5	4	5	4	4	5	4	4	4	4
10	8258	4	5	3	5	4	4	4	4	5	5
11	8259	5	5	4	4	5	5	5	4	4	4
12	8260	4	5	4	3	5	3	4	4	5	5
13	8261	4	5	4	4	5	4	5	5	4	3
14	8262	4	5	4	4	4	5	4	5	4	4



B.Sc.III (DSC 1003E3): Partial Differential Equation

		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1	8249	4	5	4	4	5	5	5	4	5	4
2	8250	5	4	5	4	5	4	5	4	4	4
3	8251	5	5	5	5	3	3	5	4	5	4
4	8252	4	5	5	4	5	4	4	4	5	5
5	8253	5	5	4	4	5	3	5	4	5	5
6	8254	5	4	5	4	5	4	5	5	5	4
7	8255	5	5	4	4	4	5	4	4	4	4
8	8256	4	5	4	5	3	5	3	4	4	5
9	8257	5	5	4	5	4	4	4	4	4	5
10	8258	5	4	5	4	5	4	5	3	4	5
11	8259	5	4	4	4	5	4	5	5	5	4
12	8260	5	4	4	5	5	4	5	4	5	4
13	8261	5	4	4	5	4	4	5	3	5	5
14	8262	5	4	4	5	4	5	4	5	4	4

B.Sc.III (DSC 1003E4): Numerical Methods

		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1	8249	4	3	4	4	5	5	4	3	3	3
2	8250	3	3	4	3	4	4	4	3	4	4
3	8251	4	3	5	4	5	3	2	5	4	5
4	8252	5	5	5	4	5	5	5	4	5	5
5	8253	3	4	3	5	4	4	5	3	3	3
6	8254	4	4	4	4	4	4	4	4	4	5
7	8255	5	5	5	5	5	5	5	5	5	5
8	8256	5	4	5	3	5	4	3	5	5	5
9	8257	5	4	5	4	5	4	5	5	4	5
10	8258	5	4	5	5	4	4	5	3	3	3
11	8259	5	5	4	5	4	4	4	3	3	4
12	8260	5	5	4	4	4	5	5	4	4	5
13	8261	5	4	4	5	5	5	4	5	3	3
14	8262	4	5	5	4	4	5	5	4	5	4

B.Sc.III (DSC-1003F1): Metric Space

		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1	8249	3	4	3	4	3	4	3	4	3	4
2	8250	4	4	5	3	5	3	2	5	3	5
3	8251	5	5	5	4	5	5	4	5	5	5
4	8252	5	5	5	5	5	5	5	5	5	5
5	8253	5	4	4	3	3	4	4	3	4	3
6	8254	5	5	5	5	4	4	4	4	4	4
7	8255	5	5	5	5	5	5	5	5	5	5
8	8256	5	4	4	5	3	5	5	5	3	4
9	8257	5	4	5	5	4	4	3	3	3	3
10	8258	5	4	5	4	5	4	5	4	5	4
11	8259	5	4	5	5	4	4	4	4	5	4
12	8260	5	5	4	5	4	4	3	3	5	5
13	8261	4	4	5	4	5	5	4	5	4	4
14	8262	4	5	5	4	5	4	5	3	3	5



B.Sc.III (DSC-1003F2): Linear Algebra

		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1	8249	3	4	3	4	3	4	3	4	3	4
2	8250	4	4	5	3	5	3	2	5	3	5
3	8251	5	5	5	4	5	5	4	5	5	5
4	8252	5	5	5	5	5	5	5	5	5	5
5	8253	5	4	4	3	3	4	4	3	4	3
6	8254	5	5	5	5	4	4	4	4	4	4
7	8255	5	5	5	5	5	5	5	5	5	5
8	8256	5	4	4	5	3	5	5	5	3	4
9	8257	5	4	5	5	4	4	3	3	3	3
10	8258	5	4	5	4	5	4	5	4	5	4
11	8259	5	4	5	5	4	4	4	4	5	4
12	8260	5	5	4	5	4	4	3	3	5	5
13	8261	4	4	5	4	5	5	4	5	4	4
14	8262	4	5	5	4	5	4	5	3	3	5

B.Sc.III (DSC-1003F3): Complex Analysis

		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1	8249	3	4	3	4	3	4	3	3	3	3
2	8250	5	2	4	5	3	5	3	4	5	4
3	8251	5	4	5	5	5	4	5	5	5	5
4	8252	5	5	5	5	5	5	5	5	5	5
5	8253	4	3	4	3	4	3	3	3	3	4
6	8254	5	5	5	5	5	5	5	5	5	5
7	8255	5	5	5	5	5	5	5	5	5	5
8	8256	4	5	4	4	3	5	3	5	4	5
9	8257	5	4	4	5	5	4	5	4	4	5
10	8258	5	4	5	4	5	4	5	4	4	4
11	8259	5	4	5	4	5	4	4	4	4	4
12	8260	5	4	5	5	4	5	4	4	4	4
13	8261	5	5	4	4	4	3	3	4	5	5
14	8262	5	4	5	4	3	3	3	4	3	3

B.Sc.III (DSC-1003F4): Optimization Technique

		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1	8249	5	5	5	5	5	4	4	5	5	4
2	8250	4	3	4	3	3	4	3	4	3	4
3	8251	4	5	4	3	4	5	5	3	4	5
4	8252	5	5	5	5	5	5	5	5	5	5
5	8253	5	5	5	5	5	5	5	5	5	5
6	8254	3	4	3	3	4	3	4	3	3	4
	8255	5	5	5	3	4	5	4	4	4	5
8	8256	4	4	4	4	4	4	4	4	4	5
9	8257	5	5	5	5	5	5	5	5	5	5
10	8258	3	5	4	5	3	5	4	4	4	5
11	8259	5	4	5	4	5	4	5	4	3	4
12	8260	4	5	4	5	4	4	4	4	4	5
13	8261	5	4	5	4	5	4	4	5	5	5
14	8262	4	5	5	4	5	4	4	4	3	3

