CDOE/2023-24/Nov/oo4 0

Date: -29-11-2023

Centre for Distance and Online Education

Ref: HEI PRESENTATION – "Programme offered in conventional mode with same nomenclature"

Name of Programme: M.Sc. (Mathematics)

This is to certify that:

a. Master of Science (Mathematics)programme proposed to be offered in the 'ODL' Mode from the AY 2023-24contains same nomenclature as per the programme offered in conventional mode.
b. Entry Level Qualifications for M.Sc. Mathematics Programme are as per the following:
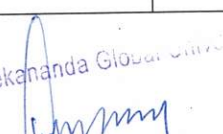
Conventional Mode	ODL Mode
Graduates with BA/BSc degree with Mathematics as one of the three main subjects	Graduates with BA/BSc degree with Mathematics as one of the three main subjects

M.Sc. Mathematics programme proposed to be offered in the 'ODL' Mode from the AY 2023-24 contains **same 'Entry Level Qualifications'** as per the programme offered in conventional mode.
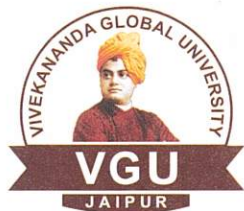
c. Curriculum
d. Teaching Learning Scheme

TEACHING SCHEME OF M.Sc. MATHEMATICS IN CONVENTIONAL SCHEME

Semester I			
Course Code	University Course Type	Course Name	C
MAT158	Core Theory	Advanced Abstract Algebra	5
MAT 159	Core Theory	Topology	5
MAT 160	Core Theory	Integral Transforms	5

For Vivekananda Global University, Jaipur

Registrar

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MAT 161	(Group A) Core Theory	Differential Geometry	5
BCS 305	Core Practical	Object Oriented Programming Lab with C++	2
BCSAI 102	(Group B) Core Theory	Elements of Computing System	3
BCSAI 104	Core Practical	Computing Systems Lab	2
BCSAI 105	Core Practical	Programming in C Language Lab	2
Total Credits			**22**

Semester I

Course Code	University Course Type	Course Name	C
MAT 163	Core Theory	Mathematical Programming	5
MAT 164	Core Theory	Combinatorics and Graph Theory	5
DSE 1	Department Specific Elective 1	Choose any one from list of DSE Courses	5
MAT 182	Core Practical	MATLAB Lab	2
MAT 162	(Group A) Core Theory	Functional Analysis	5
BCSAI 205	(Group B) Core Theory	Digital Electronics	3
BCSAI 206	(Group B) Core Theory	Digital Electronics Lab	2
Total Credits			**22**

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Semester III

Course Code	University Course Type	Course Name	C
MAT 168	Core Theory	Advanced Linear Algebra	5
MAT 169	Core Theory	Operations Research	5
MAT 170	Core Theory	Advanced Graph Theory-I	5
DSE 2	Department Specific Elective 2	Choose any one from list of DSE Courses	5
MAT 180	(Group A) Core Practical	Numerical Analysis Lab – I	2
BCSAI 309	(Group B)Core Practical	Object Oriented Programming with Java Lab	2
Total Credits			**22**

Semester IV

Course Code	University Course Type	Course Name	C
MAT 184	Core Practical	Project	8
MAT 193	Core Practical	Seminar	2
MAT 181	CorePractical	Numerical Analysis Lab – II	2
DSE 3	Department Specific Elective 3	Choose any one from list of DSE Courses	5

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DSE 4	Department Specific Elective 4	Choose any one from list of DSE Courses	5
Total Credits			22

LIST OF DEPARTMENT SPECIFIC ELECTIVE COURSES

S. No.	Course Code	Department Specific Elective
Group A & B		
1.	MAT 165	Integral Equations
2.	MAT 167	Calculus of Variations & Special Functions
3.	MAT 171	Fluid Mechanics
4.	MAT 172	Mathematics in Multimedia
5.	MAT 173	Mathematical Modelling
6.	MAT 174	Wavelet Analysis
7.	MAT 175	Fuzzy Sets and Applications
8.	MAT 176	Cryptography
9.	MAT 178	Algorithm Design Techniques
10.	MAT 179	Mathematical Statistics
11.	MAT 202	Tensor Analysis & Number Theory
12.	MAT 203	Differential Equation and Finite Element Analysis
13.	MAT 204	Advanced Numerical Analysis
Only for Group B		
14. (a)	BCSAI 303	Data Structures & Algorithms
14.(b)	BCSAI308	Data Structures&Algorithms Lab
15. (a)	BCSAI 401	Design and Analysis of Algorithms
15.(b)	BCSAI 405	AI and Intelligent Agents
16. (a)	BCSAI 504	Data Mining and Ml

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16.(b)	BCSAI 509	Data Mining and Ml Using Python Lab
17. (a)	BCSAI 603	Advanced Machine Learning
17.(b)	BCSAI 610	Advanced Machine Learning with Python Lab

The curriculum, syllabi and teaching-learning scheme of M.Sc. Mathematicsprogramme in the 'ODL' Mode from the AY 2023-24 will remain same asabove to the M.Sc. Mathematics offered in Conventional mode.

e. **Pattern of Question Papers for Term End Examination in Conventional Mode**

Q.1	Objective Type / Short Answers Type	10 X 1 mark = 10 Marks
Q.2 to Q.6	Descriptive type Questions	5 X 10 marks = 50 Marks

The same pattern will be followed by the CDOE for conducting Term End Examination in ODL Mode.

f. **Pass or Fail Criteria**

The programmes offered by the University in conventional mode are based on Relative Grading Pattern. A detail is given below.

Statistical Method for Relative Grading

Lower Range of Marks	Grade Awarded, ifmarks falls in range		Upper Range of Marks
	UG	**PG**	
≥Mean + 1.5 σ	O	O	---
≥Mean + 1.0 σ	A+	A+	< Mean + 1.5 σ
≥Mean + 0.5 σ	A	A	< Mean + 1.0σ
≥Mean	B+	B+	< Mean + 0.5 σ
≥Mean -0.5 σ	B	B	<Mean
≥Mean − 1.0 σ	C	NC	< Mean -0.5 σ
-	NC	-	< Mean − 1.0 σ
-	Ab (Absent)	Ab (Absent)	-
-	W(Withdrawal)	W(Withdrawal)	-
-	GA(Grade Awaited)	GA(Grade Awaited)	-
-	S(Satisfactory)	S(Satisfactory)	-
-	X(Not Satisfactory)	X(Not Satisfactory)	-

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AWARD OF GRADES

The following are the general guidelines for the award of grades:

(a) All evaluations of different components of a course announced in the course plan shall be done in marks for each student.

(b) The marks of various components shall be added to get total marks secured on a 100-point scale for both theory courses and laboratory courses.

(c) The statistical method, wherever applicable, shall be used for the award of grades with or without marginal adjustment for natural cut-off. The overall distribution of different grades must be as indicated in the statistical distribution.

(d) No student having 40 % or more marks in UG programmes and 50% or more marks in PG programmes would be awarded grade 'NC'.

The same pattern will be followed by the University for offering programmes in 'ODL' Mode.

For Vivekananda Gl..... , Jaipur

(Dr. Praveen Choudhry)
Registrar   Registrar