

## Integrated M.Sc. Mathematics (Semester - 1) Assessment Policy [Theory] 060090107: GE1 Principles of Scientific Computing

Assessment Code	Assessment Type	Duration of each	Occurrence	Each of marks	Weightage in CIE of 40 marks	Remarks
A1	Unit Test	90 Minutes	2	30	7x2=14	Unit Test – 1: Unit 1and Units 2 Unit Test – 2: Unit 3 and Unit 4.1, 4.2
A2	Internal Exam	180 Minutes	1	60	14x1=14	Cover Unit : All Units
A3	Assignment	15 Days	4	7	1.75x4=7	Cover Unit : All Units
A4	Viva	20 Minutes	1	5	5x1=5	Cover Unit : All Units

## Assessment Type Classification:

Assessment Code :	A1	Coverage of Content :	Unit Test – 1: Unit 1and Units 2			
			Unit Test – 2: Unit 3 and Unit 4.1, 4.2			
Assessment Type :	Unit Test	Tentative Date :	17/09/2019 and 12/10/2019			
Kind of Question	Que. 1) Do as directed:					
Format:	[A] Objective questions [ two questi	ons, each of 1 marks] [1 x 2]				
	[B] Short questions [Any one out of	two questions , each of 3 marks] [1	x 3]			
	[C] Long questions [Any two out of t	three questions , each of 5 marks] [2	2 x 5]			
	Que. 2) Do as directed:		-			
	[A] Objective questions [ two questi	ons, each of 1 marks] [1 x 2]				
	[B] Short questions [Any one out of two questions , each of 3 marks] [1 x 3]					
	[C] Long questions [Any two out of t	three questions , each of 5 marks] [2	2 x 5]			
Assessment :	Formative					

Assessment Code :	A2	Coverage of Content :	All Units
Assessment Type :	Internal Exam	Tentative Date :	09/12/2019
Kind of Question Format:	Same as University Format		
Assessment :	Formative		



Assessment Code :	A3	Coverage of Content :	All Units				
Assessment Type :	Assignment	Tentative Date :	04/09/2019, 04/10/2019, 12/11/2019 and				
			20/11/2019				
Rules:	1. 20 questions from each unit will be given as assignment.						
	2. 15 days will be given for assignment submission.						
	3. Zero marks will be given for submission after given deadline						
Assessment :	Summative						

Assessment Code :	A4	Coverage of Content :	All Units			
Assessment Type :	Viva	Tentative Date :	09/12/2019			
Rules:	1. Viva should be taken after submission of assignments.					
	2. Zero marks will be given, if students remain absent on the time of viva without taking prior permission of leave.					
Assessment :	Summative					



# Assessment Policy [Theory] 060090107: GE1 Principles of Scientific Computing

Assessment Code	Assessment Type	Duration of each	Occurrence	Each of marks	Weightage of 50 marks	Remarks
P1	Internal Practical Examination - 1	90 minutes	1	30	15x1 = 15	List of Practical : 1 to 5
P2	Internal Practical Examination – 2	90 minutes	1	30	15x1 = 15	List of Practical : 6 to 10
P3	Internal Practical Examination – 3	100 minutes	1	40	20x1 = 20	List of Practical : 11 to 15

Assessment Code :	P1	Coverage of Content :	List of Practical : 1 to 5
Assessment Type :	Internal Practical Examination – 1	Tentative Date :	20/09/2019
Kind of question Format:	<ul> <li>Practical Programme (Four out</li> <li>Journal Submission (5 Marks)</li> <li>Viva (5 Marks)</li> </ul>	t of Five, each of 5 Marks) [20 Marks]	
Assessment :	Formative		

Assessment Code :	P2	Coverage of Content :	List of Practical : 6 to 10			
Assessment Type :	Internal Practical Examination – 2	Tentative Date :	14/09/2019			
Kind of question Format:	Practical Programme ( Four out	t of Five, each of 5 Marks) [20 Marks]				
	Journal Submission (5 Marks)					
	• Viva (5 Marks)					
Assessment :	Formative					



Assessment Code :	Р3	Coverage of Content :	List of Practical : 11 to 15
Assessment Type :	Internal Practical Examination – 3	Tentative Date :	11/12/2019
Kind of question Format:	Practical Programme (Six out o	f Eight, each of 5 Marks) [30 Marks]	
	<ul> <li>Journal Submission (5 Marks)</li> </ul>		
	• Viva (5 Marks)		
Assessment :	Formative		

#### **Course Outcomes:**

Upon completion of the course, students shall be able to

**CO1:** understand the basic concepts of mathematical computer programming.

**CO2:** become familiar with syntax related to concepts of matrix theory.

**CO3:** design and develop programs using different logical statements viz. if, for, while, do until etc.

**CO4:** plot 2D and 3D graphs of data using mathematical computer programming.

**CO5:** increase capacity with the major programming paradigms, and the principles and techniques involved in design and implementation of mathematical programming languages.

### **Programme Outcomes (PO)**

## PO 1: Knowledge

Provides knowledge about the fundamentals of pure, applied and computing mathematics and its applications to students that creates the opportunities in industries and research centers.

## **PO 2: Core Competence**

Creates competency in science and mathematics to formulate, analyses and solve problem and/or also to pursue advanced study or research. **PO 3: Breadth** 

Trains students having good knowledge in unearth core of academia and industry by the roots of mathematics. **PO 4: Evaluation** 

Imparts in students to raise trial and error based curiosity and problem solving functionality with research based advanced tutorial for higher level decision makings tools.



Assessment	Course Outcomes				Programme Outcomes				
Code	CO1	CO2	<b>CO3</b>	<b>CO4</b>	CO5	P01	P02	P03	P04
A1	$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$		$\checkmark$
A2			$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$
A3	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
A4	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$