Five years Integrated M.Sc. Mathematics (Semester - 3)
Assessment Policy [Theory]
060090303: CC7 Fundamentals of Numerical Analysis

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	$7\times2=14$	Unit Test 1: After Completion of Unit 2 Unit Test 2 : After Completion of Unit 4
A2	Internal Exam	3 hours	1	60	$14\times1=14$	Covers Unit- All units
A3	Viva	20 minutes	1	10	$5\times1=05$	Covers Unit- All units
A4	Assignment	7 days	4	10	$1.75\times4=07$	Assignment -1 : After completion of Unit-1 Assignment -2 : After completion of Unit-2 Assignment -3 : After completion of Unit-3 Assignment -4 : After completion of Unit-4

Assessment Type Classification:

Assessment Code :	A1	**Coverage of Content :**	From unit 1,2
Assessment Type :	Unit Test 1	**Tentative Date :**	10/08/2019
Kind of Question Format:	Q-1 Answer the following. (Any 3 out of 4 questions, each of 5 mark) [15 Marks] Q-2 Answer the following. (Any 3 out of 4 questions, each of 5 mark) [15 Marks]		
Assessment :	Formative		

Assessment Code :	A1	**Coverage of Content :**	From unit 3,4
Assessment Type :	Unit Test 2	**Tentative Date :**	17/09/2019
Kind of Question Format:	Q-1 Answer the following. (Any 3 out of 4 questions, each of 5 mark) [15 Marks] Q-2 Answer the following. (Any 3 out of 4 questions, each of 5 mark) [15 Marks]		
Assessment :	Formative		

Assessment Code :	A2	**Coverage of Content :**	Covers Unit- All units
Assessment Type :	Internal Exam	**Tentative Date :**	14/10/2019
Kind of Question Format:	Q-1 Answer the following. (Any 3 out of 4 questions, each of 5 mark) [15 Marks] Q-2 Answer the following. (Any 3 out of 4 questions, each of 5 mark) [15 Marks] Q-3 Answer the following. (Any 3 out of 4 questions, each of 5 mark) [15 Marks] Q-4 Answer the following. (Any 3 out of 4 questions, each of 5 mark) [15 Marks]		
Assessment :	Formative		

Assessment Code :	A3	**Coverage of Content :**	Covers Unit- All units
Assessment Type :	Assignment	**Tentative Date:**	Assignment 1: 25/07/2019 Assignment 2: 12/08/2019 Assignment 3: 30/08/2019 Assignment 4: 23/09/2019
Kind of Question Format:	1. 8 questions (short questions and long questions) from all units will be given as assignment. 2. Questions will be given in the very next lecture once the unit gets over. 3. 07 days will be given for assignment submission. 4. Zero marks will be given for submission after given deadline.		
Assessment :	Formative		

Assessment Code :	A4	**Coverage of Content :**	After completion of Syllabus
Assessment Type :	Viva	**Tentative Date :**	
Kind of Question Format:	1. Viva should be taken after completion of Syllabus. 2. Zero marks will be given, if students remain absent on the day of viva without taking prior permission of leave or students not give the viva of given topic.		
Assessment :	Formative		

Five years Integrated M.Sc. Mathematics (Semester - 3)
Assessment Policy [Particle]
060090303: CC7 Fundamentals of Numerical Analysis (Practical Credit-2)

Assessment Code	Assessment Type	Duration of each	Occurrence	Each of marks	Weightage in CIE of 40 marks	Remarks
P1	Practical Examination	90 minutes	2	30	$15\times 2=30$	Practical – 1: After completion of Unit-2 Practical – 2: After completion of Unit-4
P2	Practical Examination	90 minutes	1	40	$20\times 1=20$	Practical – 3: After completion of Unit-3 and Unit-4

Assessment Code :	P1	**Coverage of Content :**	Practical – 1: After completion of Unit-2 Practical – 2: After completion of Unit-4
Assessment Type :	Practical Examination	**Tentative Date :**	Practical – 1: 15/08/2019 Practical – 2: 24/09/2019
Kind of Question Format:	1. Practical Programme (2 out of 3, each of 10 Marks) 2. Journal Submission (5 Marks) 3. Viva Voce (5 Marks)		
Assessment :	Formative		

Assessment Code :	P2	**Coverage of Content :**	Practical – 3 : After completion of Unit-3 and Unit-4
Assessment Type :	Practical Examination	**Tentative Date :**	Practical – 3: 17/10/2019
Kind of Question Format:	1. Practical Programme (2 out of 3, each of 15 Marks) 2. Journal Submission (5 Marks) 3. Viva Voce (5 Marks)		
Assessment :	Formative		

Assessment Type Mapping with Course Outcomes and Program Outcomes:

Course outcomes: Upon completion of the course, students shall be able to

CO1: calculate the numerical error viz. absolute error, relative error and percentage error in the solution.

CO2: understand the different numerical approach to solve the Algebraic and Transcendental equations with error part.

CO3: develop skill of solving the linear system of equations through various matrix Inversion methods.

CO4: derive all eigen values or a maximum eigen value and the related eigen vectors of a Matrix.
CO5: predict the missing data within the range of given information using various difference operators like forward, backward and central.
CO6: achieve numerical solution as an alternative way of analytical solution of a problem.

Programme Outcomes (PO)

PO1: 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.

PO2: Core Competence
Creates competency in science and mathematics to formulate, analyses and solve problem and/or also to pursue advanced study or research.

PO3: Breadth
Trains students having good knowledge in unearth core of academia and industry by the roots of mathematics.

PO4: 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 Code	Course Outcomes						Programme Outcomes			
	CO1	CO2	CO3	CO4	CO5	CO6	PO1	PO2	PO3	PO4
A1	✓	✓	✓	✓	✓	✓	✓	✓		✓
A2	✓	✓	✓	✓	✓	✓	✓	✓	✓	
A3	✓	✓	✓	✓	✓	✓		✓		✓
A4	✓	✓	✓	✓	✓	✓	✓		✓	✓