



**Five years Integrated M.Sc. Mathematics (Semester - 4)  
Assessment Policy  
060090403: CC10 Numerical Analysis (Theory - 4 Credits)**

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	$7 \times 2 = 14$	Unit Test - 1: After completion of Unit-1 and Unit- 2 Unit Test - 2: After completion of Unit- 3 and Unit - 4
A2	Internal Examination	180 minutes	1	60	$14 \times 1 = 14$	All units.
A3	Assignment	10 days	4	10	$1.75 \times 4 = 7$	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
A4	Viva/Presentation	15 minutes	1	10	$5 \times 1 = 5$	Based on the application of Numerical Analysis

### Assessment Type Classification:

<b>Assessment Code :</b>	A1	<b>Coverage of Content :</b>	Unit Test - 1: Covers Unit-1 and Unit- 2.
<b>Assessment Type :</b>	Unit Test-1	<b>Tentative Date :</b>	Unit Test - 1:22/01/2019
<b>Kind of Question Format:</b>	Que. 1) Answer the following Question. (Any three out of four, each of 5 marks) Que. 2) Answer the following Question. (Any three out of four, each of 5 marks)		
<b>Assessment :</b>	Formative		



<b>Assessment Code :</b>	A1	<b>Coverage of Content :</b>	Unit Test – 2: Covers Unit-3 and Unit- 4.
<b>Assessment Type :</b>	Unit Test -2	<b>Tentative Date :</b>	Unit Test – 2: 06/03/2019
<b>Kind of Question Format:</b>	Que. 1) Answer the following Question. ( Any three out of four, each of 5 marks) Que. 2) Answer the following Question. ( Any three out of four, each of 5 marks)		
<b>Assessment :</b>	Formative		

<b>Assessment Code :</b>	A2	<b>Coverage of Content :</b>	All Units
<b>Assessment Type :</b>	Internal Examination	<b>Tentative Date :</b>	03/04/2019
<b>Kind of Question Format:</b>	Que. 1) Long Questions ( Any three out of four, each of 5 marks) Que. 2) Long Questions ( Any three out of four, each of 5 marks) Que. 3) Long Questions ( Any three out of four, each of 5 marks) Que. 4) Long Questions ( Any three out of four, , each of 5 marks)		
<b>Assessment :</b>	Formative		

<b>Assessment Code :</b>	A3	<b>Coverage of Content :</b>	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
<b>Assessment Type :</b>	Assignment	<b>Tentative Date :</b>	Assignment - 1 : 14/12/2019 Assignment - 2 : 19/01/2019 Assignment - 3 : 28/02/2019 Assignment - 4 : 25/03/2019
<b>Kind of Question Format:</b>	1. 10 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. Assignment has to be submitted after two days of completion of whole unit. 4. Zero mark will be given for submission after given deadline.		
<b>Assessment :</b>	Formative		



<b>Assessment Code :</b>	A4	<b>Coverage of Content :</b>	All Units
<b>Assessment Type :</b>	Viva	<b>Tentative Date :</b>	03/04/2019
<b>Kind of Question Format:</b>	1. Topic should be given from the syllabus before 20 days of the presentation. 2. 15 minutes should be given for presentation 3. Viva should be taken after completion of presentation 4. Zero marks will be given, if students remain absent on the day of presentation without taking prior permission of leave or students not give the presentation of given topic		
<b>Assessment :</b>	Formative		

### Five years Integrated M.Sc. Mathematics (Semester - 4)

#### Assessment Policy

#### 060090403: CC10 Numerical Analysis (Practical - 2 Credits)

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-3
P2	Practical Examination	90 minutes	1	40	$20 \times 1 = 20$	Practical - 3: After completion of Unit-4

<b>Assessment Code :</b>	A5	<b>Coverage of Content :</b>	Practical - 1: After completion of Unit-1 and Unit-2 Practical - 2: After completion of Unit-3 Practical - 3: After completion of Unit-4
<b>Assessment Type :</b>	Practical Examination	<b>Tentative Date :</b>	Practical - 1: 24/01/2019 Practical - 2: 11/03/2019
<b>Kind of Question Format:</b>	1. Practical Programme ( 2 out of 3, each of 10 Marks) 2. Journal Submission (5 Marks) 3. Viva Voce (5 Marks)		
<b>Assessment :</b>	Formative		



### Assessment Type Mapping with Course Outcomes and Program Outcomes:

#### Course outcomes:

Upon completion of the course, students shall be able to

**C01:** fit various types of curve to the experimental data.

**C02:** find the values of derivatives and integral through various numerical methods.

**C03:** use appropriate numerical methods to determine approximate solutions of ordinary differential equations in form of initial value problem.

**C04:** obtain an approximate solution of boundary value problem of ordinary differential equations using various numerical methods.

**C05:** achieve numerical solution as an alternative way of analytical solution of a problem.

#### 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 Code	Course Outcomes					Programme Outcomes			
	C01	C02	C03	C04	C05	P01	P02	P03	P04
A1	✓	✓	✓	✓	✓	✓	✓		✓
A2	✓	✓	✓	✓	✓	✓	✓	✓	
A3	✓	✓	✓	✓	✓		✓		✓
A4	✓	✓	✓	✓	✓	✓		✓	✓
A5	✓	✓	✓	✓	✓	✓	✓	✓	✓