Five years Integrated M.Sc. Mathematics (Semester – 3)
Assessment Policy
060090309: Ordinary Differential Equations (Theory – 6 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 x 2 = 14	Unit Test – 1: After completion of Unit-1 and Sub Units 2.1, 2.2. Unit Test – 2: After completion of Sub Units 2.3, 2.4 and Unit – 3.
A2	Internal Examination	180 minutes	1	60	14 x 1 = 14	After completion of Unit-4, which covers all units.
A3	Assignment	10 days	4	10	1.75 x 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	Presentation/Viva	1 hour	1	40	5 x 1 = 5	Cover all units.

Assessment Type Classification:

Assessment Code:	A1	Coverage of Content:	Unit Test – 1: Covers Unit-1 and Sub Units 2.1, 2.2 Unit Test – 2: Covers Sub Units 2.3, 2.4 and Unit – 3.
Assessment Type:	Unit Test-1 and Unit Test -2	Tentative Date:	Unit Test – 1: 09/08/2019 Unit Test – 2: 16/09/2019
Kind of Question Format:	Que. 1) [A] Very short Question (1+1=2 marks) [B] Short Question (Any one out of two, 3 marks) [C] Long Question (Any two out of three, 10 marks) Que. 2) [A] Short Question (3 marks)		

	[B] Long Question (Any two out of three, 12 marks)
Assessment:	Formative

Assessment Code:	A2	**Coverage of Content:**	All Units
Assessment Type:	Internal Examination	**Tentative Date:**	11/10/2019

Kind of Question Format:	Que. 1) [A] Very short Question (1+1=2 marks)
	       [B] Short Question (Any one out of two, 3 marks)
	       [C] Long Question (Any two out of three, 10 marks)
	 Que. 2) [A] Short Question (3 marks)
	       [B] Long Question (Any two out of three, 12 marks)
	 Que. 3) [A] Very short Question (1+1=2 marks)
	       [B] Short Question (Any one out of two, 3 marks)
	       [C] Long Question (Any two out of three, 10 marks)
	 Que. 4) [A] Short Question (3 marks)
	       [B] Long Question (Any two out of three, 12 marks)		

Assessment:	Summative		

Assessment Code:	A3	**Coverage of Content:**	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:	Assignment	**Tentative Date:**	Assignment - 1: 15/07/2019 Assignment - 2: 26/08/2019 Assignment - 3: 16/09/2019 Assignment - 4: 10/10/2019

Kind of Question Format:	1. Per method two examples have to solve. 2. Questions will be given on regular bases of completion of particular method. 3. Assignment has to be submitted on given date. 4. Zero mark will be given for submission after given deadline.
Assessment:	Formative

Assessment Code:	A4	Coverage of Content:	All Units
Assessment Type:	Viva	Tentative Date:	10/10/2019
Kind of Question Format:	1. Student has to select any one of the Statically method from any of the units and has to present its application in real world situation. 2. The presentation will be evaluated on the basis of four parameters viz. (i) Level of Content, (ii) Clarity, (iii) Teaching, Methodology, (iv) Overall Impact of presentation. 3. Each parameter has weighted of 10 marks. Viva At the end of the semester, viva will be taken which cover all units 10-15 questions will be asked to each student.		
Assessment:	Summative		

Assessment Type Mapping with Course Outcomes and Program Outcomes:

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

CO1: understand the different form of first order differential equation.

CO2: solve first order ordinary differential equation with appropriate mathematical approach.

CO3: establish the relation between real world problem and first order ordinary differential equation

CO4: bifurcate the second and higher order linear homogeneous and non- homogeneous ordinary differential equation.

CO5: solve both kinds of homogeneous and non- homogeneous second and higher order ordinary differential equations with respect to specific source term.

CO6: implement of the knowledge of second and higher order ordinary differential equation to fix the relevant mathematical model into real phenomena.

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 centres.
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			
	CO1	CO2	CO3	CO4	CO5	CO6	PO1	PO2	PO3	PO4
A1	✓		✓			✓	✓	✓		
A2	✓	✓		✓	✓		✓	✓	✓	✓
A3				✓	✓	✓				✓
A4				✓	✓	✓	✓	✓	✓	✓