



Five years Integrated M.Sc. Mathematics (Semester - 8)

Assessment Policy

060090801: Fundamentals of Differential Geometry

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 the completion of whole unit 1 and Unit 2 (i.e. 2.1, 2.2, 2.3) Unit Test 2: -After the completion of Unit 2 (2.4, 2.5,2.6) and whole Unit 3
A2	Internal Exam	3 hours	1	60	$14 \times 1 = 14$	Cover Unit: - All Units
A3	Assignment	15 Days	4	10	$1.75 \times 4 = 7$	Cover Unit: - All Units
A4	Presentation/Viva	20 Minutes	1	5	$1 \times 5 = 5$	Cover Unit: - All Units

Assessment Type Classification:

Assessment Code :	A1	Coverage of Content :	From whole unit 1 and unit 2 (i.e. 2.1, 2.2, 2.3)
Assessment Type :	Unit Test 1	Tentative Date :	21/02/2019
Kind of Question Format:	Q1 Answer the following [any three] [15 marks] Q2 Answer the following [any three] [15 marks]		
Assessment :	Formative		

Assessment Code :	A1	Coverage of Content :	From Unit 2 (2.5, 2.6, 2.7) and whole Unit 3
Assessment Type :	Unit Test 2	Tentative Date :	01/04/2019
Kind of Question Format:	Q1 Answer the following [any three] [15 marks] Q2 Answer the following [any three] [15 marks]		



Assessment :	Formative
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Assessment Code :	A2	Coverage of Content :	All Units
Assessment Type :	Internal Exam	Tentative Date :	28/04/2019
Kind of Question Format:	Q1 Answer the following [any three] [15 marks] Q2 Answer the following [any three] [15 marks] Q3 Answer the following [any three] [15 marks] Q4 Answer the following [any three] [15 marks]		
Assessment :	Summative		

Assessment Code :	A3	Coverage of Content :	All Units
Assessment Type :	Assignment		
Rules :	1. 10 questions from each unit will be given as assignment. 2. Questions will be given in every tutorial lecture. 3. 7 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 :	All Units
Assessment Type :	Presentation/Viva		
Rules :	1. Topic should be given from the syllabus before 25 days of the presentation. 2. 10 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.		
Assessment :	Summative		



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

CO1: evaluate the curvature of curves in E^N for cartesian forms, polar forms and parametric forms.

CO2: compute and interpret different variants of a surface as tangent plane, vector fields and first fundamental form.

CO3: calculate the normal and principal curvature on a surface, Geodesics, Geodesic curvature and their connections with the first and second fundamental form and Euler's theorem.

CO4: obtain sound knowledge in understanding of Gauss' theory of curvature of surfaces, Gauss' theorem and Egregium.

CO5: apply differential geometry techniques to specific research problems in mathematics and other fields.

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