



## Five years Integrated M.Sc. Mathematics (Semester - 5)

### Assessment Policy

#### 060090503: DSE1 Discrete Mathematics and Graph Theory (Theory)

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	$7 \times 2 = 14$	<b>Unit Test 1:</b> - After the completion of whole unit 1 and Unit 2 (i.e. 2.1, 2.2, 2.3) <b>Unit Test 2:</b> - After the completion of Unit 2 (2.4, 2.5, 2.6, 2.7) and whole Unit 3
A2	Internal Exam	3 hours	1	60	$14 \times 1 = 14$	Cover Unit: - All Units
A3	Assignment	10 Days	4	10	$1.75 \times 4 = 7$	Cover Unit: - All Units
A4	Presentation	15 Minutes	1	5	$5 \times 1 = 5$	Based on Application of Discrete Mathematics and Graph Theory

#### Assessment Type Classification:

<b>Assessment Code :</b>	A1	<b>Coverage of Content :</b>	From whole unit 1 and Unit 2 (i.e. 2.1, 2.2, 2.3)
<b>Assessment Type :</b>	Unit Test 1	<b>Tentative Date :</b>	10/08/2019
<b>Kind of Question Format:</b>	Q-1(A) Short answer questions. (6 out of 6 questions of 1 mark) [6 Marks] (B) Long answer question. (3 out of 4 questions of 3 marks) [9 Marks] Q-2 (A) Long answer question. (1 or 1 questions of 5 marks) [5 Marks] Q-2 (B) Long answer question. (2 out of 3 questions of 5 marks) [10 Marks]		
<b>Assessment :</b>	Formative		

<b>Assessment Code :</b>	A1	<b>Coverage of Content :</b>	From Unit 2 (2.4, 2.5, 2.6, 2.7) and whole Unit 3
<b>Assessment Type :</b>	Unit Test 2	<b>Tentative Date :</b>	17/09/2019
<b>Kind of Question Format:</b>	Q-1(A) Short answer questions. (6 out of 6 questions of 1 mark) [6 Marks] (B) Long answer question. (3 out of 4 questions of 3 marks) [9 Marks]		



	Q-2 (A) Long answer question. (1 or 1 questions of 5 marks) [5 Marks] Q-2 (B) Long answer question. (2 out of 3 questions of 5 marks) [10 Marks]
<b>Assessment :</b>	Formative

<b>Assessment Code :</b>	A2	<b>Coverage of Content :</b>	All Units
<b>Assessment Type :</b>	Internal Exam	<b>Tentative Date :</b>	15/10/2019
<b>Kind of Question Format:</b>	Same as University format		
<b>Assessment :</b>	Summative		

<b>Assessment Code :</b>	A3	<b>Coverage of Content :</b>	All Units
<b>Assessment Type :</b>	Assignment		
<b>Rules :</b>	1. 10 questions (5 short questions and 5 long questions) from all unit will be given as assignment 2. Questions will be given in the very next lecture once the unit gets over. 3. 10 days will be given for assignment submission. 4. Zero marks 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>	Presentation		
<b>Rules :</b>	1. Topic should be submitted by students before 30 days of the presentation based on application of Discrete Mathematics and Graph Theory. 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>	Summative		



### Five years Integrated M.Sc. Mathematics (Semester - 5)

#### Assessment Policy

#### 060090503: DSE1 Discrete Mathematics and Graph Theory (Practical)

Assessment Code	Assessment Type	Duration of each	Occurrence	Each of marks	Weightage in CIE of 50 marks	Remarks
A1	Practical Examination	90 minutes	2	30	15 x 2 = 30	Practical - 1: After completion of Unit-1 and Unit-2.1,2.2,2.3,2.4 Practical - 2: After completion of Unit-2.5,2.6,2.7 and Unit-3
A2	Practical Examination	90 minutes	1	40	20 x 1 = 20	Practical Unit-4 - 3: After completion of Unit-3 and

<b>Assessment Code :</b>	A1	<b>Coverage of Content :</b>	Practical - 1: After completion of Unit-1 and Unit-2.1,2.2,2.3,2.4 Practical - 2: After completion of Unit-2.5,2.6,2.7 and Unit-3
<b>Assessment Type :</b>	Practical Examination	<b>Tentative Date :</b>	Practical - 1: 31/07/2019 Practical - 2: 11/09/2019
<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		

<b>Assessment Code :</b>	A2	<b>Coverage of Content :</b>	Practical - 3 : After completion of Unit-3 and Unit-4
<b>Assessment Type :</b>	Practical Examination	<b>Tentative Date :</b>	Practical - 3: 16/10/2018
<b>Kind of Question Format:</b>	4. Practical Programme ( 3 out of 4, each of 10 Marks) 5. Journal Submission (5 Marks) 6. Viva Voce (5 Marks)		
<b>Assessment :</b>	Formative		



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

**CO1:** understand the fundamentals of Boolean algebra and learn various Boolean expression.

**CO2:** simplify the digital circuit using logical operators of Boolean algebra.

**CO3:** fetch data from database by applying the concept of Lattice.

**CO4:** detect error and analyze the complexity level of algorithms in Finite Automaton.

**CO5:** learn basics of graph theory and minimize the graph to obtain optimum network.

**CO6:** understand the types, properties and components of discrete mathematical tree.

**CO7:** learn the minimization of tree using Prim's and Kruskal's algorithm

**CO8:** Apply propositional logic to related concept of artificial intelligent.

### 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	CO7	CO8	PO1	PO2	PO3	PO4
A1	✓	✓	✓					✓	✓	✓		
A2		✓		✓		✓	✓	✓	✓			✓
A3		✓	✓			✓		✓		✓	✓	✓
A4	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓