Five years Integrated M.Sc. Mathematics (Semester - 7)
Assessment Policy
060090702: Functional 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 X 2 = 14	**Unit Test 1: -** After the completion of whole unit 1 and Unit 2 (i.e. 2.1, 2.2, 2.3,.2.4) **Unit Test 2: -** After the completion of Unit 2 (2.5, 2.6, 2.7, 2,8) and whole Unit 3
A2	Internal Exam	3 hours	1	60	14 X 1 = 14	Cover Unit: - All Units
A3	Assignment	15 Days	4	10	1.75 X 4 = 7	Cover Unit: - All Units
A4	Viva	20 Minutes	1	5	1 X 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,.2.4)
Assessment Type :	Unit Test 1	**Tentative Date :**	16/09/2019
Kind of Question Format:	Q1 Answer the following (any 3). [3 X 5 = 15] Q2(A) Answer the following [1 X 2 = 2] Q2(B) Answer the following. (Any 1) [1 X 3 = 3] Q2(C) Answer the following. (Any 2) [2 X 5 = 10]		
Assessment :	Formative		

Assessment Code :	A1	Coverage of Content :	From Unit 2 (2.5, 2.6, 2.7, 2,8) and whole Unit 3
Assessment Type :	Unit Test 2	**Tentative Date :**	12/10/2019
Kind of Question Format:	Q1(A) Answer the following [1 X 2 = 2] Q1(B) Answer the following. (Any 1) [1 X 3 = 3] Q1(C) Answer the following. (Any 2) [2 X 5 = 10]		

Q2(A) Answer the following [1 X 2 = 2] Q2(B) Answer the following. (Any 1) [1 X 3 = 3] Q2(C) Answer the following. (Any 2) [2 X 5 = 10]	
Assessment :	Formative

Assessment Code :	A2	**Coverage of Content :**	All Units
Assessment Type :	Internal Exam	**Tentative Date :**	16/12/2019
Kind of Question Format:	Same as University format		
Assessment :	Summative		

Assessment Code :	A3	**Coverage of Content :**	All Units
Assessment Type :	Assignment		
Rules :	1. 15 questions from each unit will be given as assignment. 2. Questions will be given in the very next lecture once the unit gets over. 3. 15 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 :	Viva		
Rules :	1. 10-12 basic and short type of question asked to each student from any unit with equal weightage. 2. Marks will be given on the basis of knowledge share.		
Assessment :	Summative		

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

CO1: deal with various examples of metric spaces, work with completeness, have some familiarity with continuous maps.

CO2: recognize the fundamental properties of normed spaces and of the transformations between them.

CO3: explore the properties of linear spaces and linear operators.

CO4: describe the geometry and properties of inner product spaces, Provide suitable representations of functionals on Hilbert spaces.

CO5: check whether a linear operator is bounded, to find its adjoint and determine whether operators are normal, self-adjoint, unitary or positive.

CO6: utilize Zorn's lemma, Apply the Hahn-Banach theorem for complex vector spaces and normed spaces.

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	✓	✓	✓	✓	✓	✓	✓		✓	✓