Five years Integrated M.Sc. Mathematics (Semester - 4)
Assessment Policy
060090402: CC9 Higher Ordered Differential Equations and Transforms

| Assessment Code | Assessment Type | Duration of each | Occurrence | Each of marks | Weightage in CIE of <br> 40 marks | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A1 | Unit Test | 90 Minutes | 2 | 30 | $7 \times 2=14$ | Unit Test $1:$ Unit 1 and Unit $2.1-2.3$ <br> Unit Test $2:$ Unit $2.4,2.5$ and Unit 3 |
| A2 | Internal Exam | 180 Minutes | 1 | 60 | Cover Unit : All Units |  |
| A3 | Assignment | 15 Days | 2 | 2.5 | $2.5 \times 2=5$ | Cover Unit : All Units |
| A4 | Presentation and <br> Viva | 20 Minutes | 1 | 7 | $7 \times 1=7$ | Cover Unit : All Units |

## Assessment Type Classification:

| Assessment Code: | A1 | Coverage of Content : | Unit Test 1 : Unit 1 and Unit 2.1-2.3 Unit Test 2 : Unit 2.4,2.5 and Unit 3 |
| :---: | :---: | :---: | :---: |
| Assessment Type: | Unit Test | Tentative Date: | 21/01/2019 and 05/03/2019 |
| Kind of Question Format: | Que: 1 (A) Answer the Following. (2 Marks) <br> (B) Answer the Following [ Any one] (3Marks) <br> (C) Answer the Following [ Any Two] (10Marks) <br> Que: 2 (A) Answer the Following. (2 Marks) <br> (B) Answer the Following [ Any one] (3Marks) <br> (C) Answer the Following [ Any Two] (10Marks) |  |  |
| Assessment: | Formative |  |  |


| Assessment Code: | A2 | Coverage of Content : | All Units |
| :---: | :---: | :---: | :---: |
| Assessment Type: | Internal Exam | Tentative Date : | 02/04/2019 |
| Kind of Question Format: | Same as University Format |  |  |
| Assessment: | Formative |  |  |
| Assessment Code: | A3 | Coverage of Content : | All Units |
| Assessment Type: | Assignment | Tentative Date: | 28/02/2019 and 01/04/2018 |
| Rules: | 1. 40 questions from all units will be given as assignment. <br> 2. 15 days will be given for assignment submission. <br> 3. Zero marks will be given for submission after given deadline |  |  |
| Assessment : | Summative |  |  |


| Assessment Code: | A4 | Coverage of Content : | All Units |
| :--- | :--- | :--- | :--- |
| Assessment Type: | Presentation and Viva | Tentative Date : | $27 / 03 / 2019$ |
| Rules: | 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 <br> 4. Zero marks will be given, if students remain absent on the day of presentation without taking prior permission of leave or <br> students not give the presentation of given topic. |  |  |
| Assessment: | Summative |  |  |

## Course Outcomes:

Upon completion of the course, students shall be able to
C01: analyze certain physical problems (tank flow, compound interest, mechanical and electrical vibration), set up their determining differential equations and solve them by using various methods.
CO2: Have a fundamental understanding of Fourier series and be able to give Fourier expansions of a given function.
CO3: compute the Fourier series representation of a periodic Continuous Time (CT) signal; determine the Fourier transform of a Continuous Time signal.
C04: Represent a periodic Discrete Time (DT) signal through Fourier series and find the Fourier transform of a Discrete Time signal.
C05: Solve a basic integrodifferential equation using the Laplace transform.

## DEPARTMENT OF MATHEMATICS

## 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 <br> Code | Course Outcomes |  |  |  |  | Programme Outcomes |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | CO1 | CO2 | CO3 | CO4 | CO5 | PO1 | PO2 | PO3 | PO4 |
| A1 |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |
| A2 |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |
| A3 |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |
| A4 | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |

