Five years Integrated M.Sc. Mathematics (Semester - 5)
Assessment Policy
060090505: DSE2Group 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 | $7 \mathrm{X} 2=14$ | Unit Test 1: -After the completion of whole unit 1 and Unit 2 (i.e. 2.1, 2.2, 2.3) <br> Unit Test 2: -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 | $14 \mathrm{X} 1=14$ | Cover Unit: - All Units |
| A3 | Assignment | 15 Days | 4 | 10 | $1.75 \times 4=7$ | Cover Unit: - All Units |
| A4 | Presentation and Viva | 20 Minutes | 1 | 5 | $1 \mathrm{X} 5=5$ | 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) |
| :---: | :---: | :---: | :---: |
| Assessment Type: | Unit Test 1 | Tentative Date: | 14/08/2019 |
| Kind of Question Format: | Q1(A) Answer the following <br> Q1(B) Answer the following. (Any 1) <br> Q1(C) Answer the following. (Any 2) <br> Q2(A) Answer the following <br> Q2(B) Answer the following. (Any 1) <br> Q2(C) Answer the following. (Any 2) |  |  |
| Assessment: | Formative |  |  |


| Assessment Code : | A1 | Coverage of Content : | From Unit 2 (2.4, 2.5, 2.6, 2.7) and whole Unit 3 |
| :--- | :--- | :--- | :--- |
| Assessment Type : | Unit Test 2 | Tentative Date : | 19/09/2019 |


| Kind of Question | Q1(A) Answer the following |  |
| :--- | :--- | :--- |
| Format: | Q1(B) Answer the following. (Any 1) | $[1 \times 2=2]$ |
|  | Q1(C) Answer the following. (Any 2) | $[1 \times 3=3]$ |
|  | Q2(A) Answer the following | $[2 \times 5=10]$ |
|  | Q2(B) Answer the following. (Any 1) | $[1 \times 2=2]$ |
|  | Q2(C) Answer the following. (Any 2) | $[1 \times 3=3]$ |
| Formative |  |  |
|  |  |  |


| Assessment Code : | A2 | Coverage of Content : | All Units |
| :---: | :---: | :---: | :---: |
| Assessment Type : | Internal Exam | Tentative Date : | 17/10/2019 |
| Kind of Question Format: | Que. 1) Do as directed: <br> [a] Objective questions [ two questions, each of 1 marks] [ $1 \times 2$ ] <br> [a] Short questions [Any one out of two questions, each of 3 marks] [1 x 3] <br> [a] Long questions [Any two out of three questions, each of 5 marks] [ $2 \times 5$ ] <br> Que. 2) Do as directed: <br> [a] Objective questions [ two questions, each of 1 marks] [1 x 2] <br> [a] Short questions [Any one out of two questions, each of 3 marks] [1 x 3] <br> [a] Long questions [Any two out of three questions, each of 5 marks] [ $2 \times 5$ ] <br> Que.3) Do as directed: <br> [a] Objective questions [ two questions, each of 1 marks] [ $1 \times 2$ ] <br> [a] Short questions [Any one out of two questions, each of 3 marks] [1 x 3] <br> [a] Long questions [Any two out of three questions, each of 5 marks] [ $2 \times 5$ ] <br> Que. 4) Do as directed: <br> [a] Objective questions [ two questions, each of 1 marks] [ $1 \times 2$ ] <br> [a] Short questions [Any one out of two questions, each of 3 marks] [1 x 3] <br> [a] Long questions [Any two out of three questions, each of 5 marks] [ $2 \times 5$ ] |  |  |
| Assessment : | Summative |  |  |


| Assessment Code : | A3 | Coverage of Content: | All Units |
| :--- | :--- | :--- | :--- |
| Assessment Type : | Assignment |  |  |
| Rules : | $1.20(10$ question+ 10 question given in each tutorial) 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 and Viva |  |  |
| 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 |  |  |
|  | 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: summarize the properties of group and classify that whether set of elements with binary operation is group or not.
CO2:determine possible subgroups of a group, to identify normal subgroups of a group.
C03: explain the subgroups using Lagrange's theorem and to construction a permutation group.
CO4: determine a given group is cyclic or not and find a generator for a subgroup of a given order, verify that the cyclic group is isomorphism or not.
CO5: define and test a potential isomorphism for being well-defined, a homomorphism and understand the significance of Cayley's theorem.

## Programme Outcomes (PO)

## P01: 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.
P03: Breadth

## DEPARTMENT OF MATHEMATICS

Trains students having good knowledge in unearth core of academia and industry by the roots of mathematics.
P04: 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 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |
| A2 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |
| A3 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| A4 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |

