

Department of Mathematics

Sarat Centenary College

Academic Plan and Activities

Academic Session: 2022-2023

Distribution of syllabus into Modules and Units of B.Sc. Honours Course CBCS

Semester-1

1st Module (July to September)

Core Course 1: Calculus, Geometry & Differential Equations (BMH1CC01)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 1: Prof. Shampa Dutta

Unit 2: Dr. Prमित Rej

Unit 3: Dr. Bidyut Santra

Core Course 2: Algebra (BMH1CC02)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 1: Dr. Prमित Rej

Unit 2-3: Dr. Ujjal Kumar Mukherjee

2nd Module (October to December)

Core Course 1: Calculus, Geometry & Differential Equations (BMH1CC01)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 1: Prof. Shampa Dutta

Unit 2: Dr. Prमित Rej

Unit 4: Dr. Bidyut Santra

Internal Assessment: 1st Week of December

Theory and Practical Examination: as per notification of B.U. (Tentatively on December)

Core Course 2: Algebra (BMH1CC02)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 1: Dr. Prमित Rej

Unit 4: Dr. Ujjal Kumar Mukherjee

Internal Assessment: 1st Week of December

Theory and Practical Examination as per notification of B.U. (Tentatively on December)

Semester-II

1st Module (January to March)

Core Course 3: Real Analysis (BMH2CC03)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 1: Dr. Bidyut Santra

Unit 3: Dr. Ujjal Kumar Mukherjee

Core Course 4: Differential Equation and Vector Calculus (BMH2CC04)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 1: Dr. Prमित Rej

Unit 3: Dr Ujjal Kumar Mukherjee

Unit 4: Prof. Shampa Dutta

2nd Module (April to June)

Core Course 3: Real Analysis (BMH2CC03)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 2: Dr. Bidyut Santra

Unit 3: Dr. Ujjal Kumar Mukherjee

Internal Assessment: 4th Week of May

Theory and Practical Examination: as per notification of B.U. (Tentatively on June)

Core Course 4: Differential Equation and Vector Calculus (BMH2CC04)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 2: Dr. Prमित Rej

Unit 3: Dr. Ujjal Kumar Mukherjee

Unit 4: Prof. Shampa Dutta

Internal Assessment: 4th Week of May

Theory and Practical Examination: as per notification of B.U. (Tentatively on June)

Semester-III

1st Module (July to September)

Core Course 5: Theory of Real Functions & Introduction to Metric Space(BMH3CC05)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 1-2: Dr. Ujjal Kumar Mukherjee

Core Course 6: Group Theory–I (BMH3CC06)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 1-2: Dr. Bidyut Santra

Unit 3: Prof. Shampa Dutta

Core Course 7: Numerical Methods & Numerical Methods Lab (BMH3CC07)

Credits: Theory-4, Practical-2, Marks – 75, Theory – 40, Practical – 20, Internal Assessment – 10, Attendance-05

Unit 1-3: Dr. Prमित Rej

Practical

SEC-1
Logic and Sets (BMH3SEC11)

Credits: Theory-2, Marks – 50, Theory – 40, Internal Assessment – 10

Unit 1-2: Dr. Ujjal Kumar Mukherjee

2nd Module (October to December)

Core Course 5: Theory of Real Functions & Introduction to Metric Space(BMH3CC05)
Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 3-4: Dr Ujjal Kumar Mukherjee
Internal Assessment: 1st Week of December

Theory and Practical Examination: as per notification of B.U. (Tentatively in December)

Core Course 6: Group Theory–I(BMH3CC06)
Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 4-5: Dr. Bidyut Santra
Unit 3: Prof. Shampa Dutta
Internal Assessment: 1st Week of December

Theory and Practical Examination: as per notification of B.U. (Tentatively in December)

Core Course 7: Numerical Methods & Numerical Methods Lab (BMH3CC07)
Credits: Theory-4, Practical-2, Marks – 75, Theory – 40, Practical – 20, Internal Assessment – 10, Attendance-05

Unit 3-6: Dr. Pramit Rej
Practical
Internal Assessment: 1st Week of December

Theory and Practical Examination: as per notification of B.U. (Tentatively in December)

SEC-1
Logic and Sets (BMH3SEC11)

Credits: Theory-2, Marks – 50, Theory – 40, Internal Assessment – 10

Unit 3: Dr. Ujjal Kumar Mukherjee
Internal Assessment: 1st Week of December

Theory and Practical Examination: as per notification of B.U. (Tentatively in December)

Semester IV
1st Module (January to March)

Core Course 8: Riemann Integration and Series of Functions (BMH4CC08)
Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit-1-3: Dr. Ujjal Kumar Mukherjee

Core Course 9: Multivariate Calculus (BMH4CC09)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 1: Dr. Prमित Rej

Unit 3: Prof. Shampa Dutta

Core Course 10: Ring Theory and Linear Algebra I (BMH4CC10)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 1-2: Dr. Bidyut Santra

SEC-2: Graph Theory (BMH4SEC21)

Credits: Theory-2, Marks – 50, Theory – 40, Internal Assessment – 10

Unit 1-2: Dr Ujjal Kumar Mukherjee

2nd Module (April to June)

Core Course 8: Riemann Integration and Series of Functions (BMH4CC08)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit-4-5: Dr Ujjal Kumar Mukherjee

Internal Assessment: 4th Week of May

Theory and Practical Examination: as per notification of B.U. (Tentatively on June)

Core Course 9: Multivariate Calculus (BMH4CC09)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 2: Dr. Prमित Rej

Unit 4: Prof. Shampa Dutta

Internal Assessment: 4th Week of May

Theory and Practical Examination: as per notification of B.U. (Tentatively on June)

Core Course 10: Ring Theory and Linear Algebra I (BMH4CC10)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 3-4: Dr. Bidyut Santra

Internal Assessment: 4th Week of May

Theory and Practical Examination: as per notification of B.U. (Tentatively on June)

SEC-2: Graph Theory (BMH4SEC21)

Credits: Theory-2, Marks – 50, Theory – 40, Internal Assessment – 10

Unit 3: Dr. Ujjal Kumar Mukherjee

Internal Assessment: 4th Week of May

Theory and Practical Examination: as per notification of B.U. (Tentatively on June)

Semester V

1st Module (July to September)

Core Course 11: Partial Differential Equations and Applications (BMH5CC11)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 1-2: Dr Ujjal Kumar Mukherjee

Core Course 12: Mechanics I (BMH5CC12)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 1-2: Dr. Pramit Rej

Discipline Specific Elective

DSE 1: Linear Programming (BMH5DSE11)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 1-2: Dr. Bidyut Santra

DSE- 2: Probability and Statistics (BMH5DSE21)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 1-2: Prof. Shampa Dutta

2nd Module (October to December)

Core Course 11: Partial Differential Equations and Applications (BMH5CC11)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 3: Dr. Ujjal Kumar Mukherjee

Internal Assessment: 1st Week of December

Theory and Practical Examination: as per notification of B.U. (Tentatively on December)

Core Course 12: Mechanics I (BMH5CC12)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 2-3: Dr. Pramit Rej

Internal Assessment: 1st Week of December

Theory and Practical Examination: as per notification of B.U. (Tentatively on December)

Discipline Specific Elective

DSE 1: Linear Programming (BMH5DSE11)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 3-4: Dr. Bidyut Santra

Internal Assessment: 1st Week of December

Theory and Practical Examination: as per notification of B.U. (Tentatively on December)

DSE- 2: Probability and Statistics (BMH5DSE21)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 3-4: Prof. Shampa Dutta

Internal Assessment: 1st Week of December

Theory and Practical Examination: as per notification of B.U. (Tentatively in December)

Semester VI

1st Module (January to March)

Core Course 13: Metric Spaces and Complex Analysis (BMH6CC13)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 1-3: Dr. Ujjal Kumar Mukherjee

Core Course 14: Ring Theory and Linear Algebra II (BMH6CC14)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

**Unit 1: Dr. Bidyut Santra
Unit 3: Prof. Shampa Dutta**

DSE-4 : Mechanics-II (BMH6DSE43)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 1-2: Dr. Pramit Rej

Course: Project Work (BMH6PW01)

Credits: Practical-6, Marks – 75, Written Submission-40, Seminar Presentation -20, Viva-Voce-15

Name of the Teachers : Dr. Ujjal Kumar Mukherjee

Dr. Bidyut Santra

Dr. Pramit Rej

Prof. Shampa Dutta

2nd Module (April to June)

Core Course 13: Metric Spaces and Complex Analysis (BMH6CC13)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

**Unit 4-6: Dr. Ujjal Kumar Mukherjee
Internal Assessment: 4th Week of May**

Theory and Practical Examination: as per notification of B.U. (Tentatively on June)

Core Course 14: Ring Theory and Linear Algebra II (BMH6CC14)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

**Unit 2: Dr. Bidyut Santra
Unit 4: Prof. Shampa Dutta
Internal Assessment: 4th Week of May**

Theory and Practical Examination: as per notification of B.U. (Tentatively on June)

DSE-4: Mechanics-II (BMH6DSE43)

Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

**Unit 2-3: Dr. Pramit Rej
Internal Assessment: 4th Week of May**

Theory and Practical Examination: as per notification of B.U. (Tentatively on June)

Course: Project Work (BMH6PW01)

Credits: Practical-6, Marks – 75, Written Submission-40, Seminar Presentation -20, Viva-Voce-15

Name of the Teachers: Dr. Ujjal Kumar Mukherjee

Dr. Bidyut Santra

Dr. Pramit Rej

Prof. Shampa Dutta

Theory and Practical Examination: as per notification of B.U. (Tentatively on June)

Counselling Programme – Final week of June- General outline on the admission and scope of higher education and related jobs.