

**Department of Mathematics  
Sarat Centenary College**

**Academic Plan and Activities**

**Academic Session: 2020-2021**

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

**Semester-1**

**1<sup>st</sup> 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**

**2<sup>nd</sup> 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: 1<sup>st</sup> 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: 1<sup>st</sup> Week of December**

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

**Semester-II**

**1<sup>st</sup> 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

**2<sup>nd</sup> 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: 4<sup>th</sup> 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: 4<sup>th</sup> Week of May

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

**Semester-III**

**1<sup>st</sup> 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**

**2<sup>nd</sup> 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: 1<sup>st</sup> 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: 1<sup>st</sup> 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: 1<sup>st</sup> 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: 1<sup>st</sup> Week of December**

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

**Semester IV**  
**1<sup>st</sup> 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. Pramit 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

**2<sup>nd</sup> 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: 4<sup>th</sup> 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. Pramit Rej

Unit 4: Prof. Shampa Dutta

Internal Assessment: 4<sup>th</sup> 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: 4<sup>th</sup> 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: 4<sup>th</sup> Week of May

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

**Semester V**

**1<sup>st</sup> 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**

**2<sup>nd</sup> 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: 1<sup>st</sup> 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: 1<sup>st</sup> 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: 1<sup>st</sup> 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: 1<sup>st</sup> Week of December**

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

**Semester VI**

**1<sup>st</sup> 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. Prमित 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. Prमित Rej**

**Prof. Shampa Dutta**

**2<sup>nd</sup> 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: 4<sup>th</sup> 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: 4<sup>th</sup> 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. Prमित Rej  
Internal Assessment: 4<sup>th</sup> 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. Prमित 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.**