Department of Mathematics Sarat Centenary College

Academic Plan and Activities

Academic Session: 2019-2020

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

Semester-1

1stModule(July to September)

Core Course 1: Calculus, Geometry & DifferentialEquations(BMH1CC01) Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 1: Prof. Shampa Dutta Unit 2: Dr. Pramit 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. Pramit Rej Unit 2-3: Dr. Ujjal Kumar Mukherjee

2nd Module (October to December)

Core Course 1:Calculus, Geometry & DifferentialEquations(BMH1CC01) Credits: Theory-5, Tutorial-1, Marks – 75, Theory – 60, Internal Assessment – 10, Attendance-05

Unit 1: Prof. Shampa Dutta Unit 2: Dr. Pramit 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.PramitRej 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

1stModule(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.BidyutSantra 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.PramitRej 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.BidyutSantra 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.PramitRej 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

1stModule(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.BidyutSantra 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.PramitRej 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.BidyutSantra 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.PramitRej 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

1stModule(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.PramitRej **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.BidyutSantra

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.PramitRej **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.BidyutSantra

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

1stModule(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.PramitRej

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.BidyutSantra

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.PramitRej 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.BidyutSantra 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

1stModule(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.BidyutSantra 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.PramitRej

Course: Project Work(BMH6PW01) Credits: Practical-6,Marks – 75, Written Submission-40, Seminer Presentation -20, Viva-Voce-15

> Name of the Teachers :Dr.Ujjal Kumar Mukherjee Dr.BidyutSantra Dr.PramitRej 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.BidyutSantra 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.PramitRej 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, Seminer Presentation -20, Viva-Voce-15

> Name of the Teachers: Dr.Ujjal Kumar Mukherjee Dr.BidyutSantra Dr.PramitRej 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.