Polba Mahavidyalaya Departmental Lesson Plan 2019-2020

Name of the Department: Mathematics

Name of the Programme: B.Sc. (General)

Name of the Course: Mathematics

Period of the Lesson Plan: 1st July 2019 – 30th June 2020

ODD SEMESTER

| Academic Period | Class | Paper | Topic to be covered | No of lectures | Name of the teacher | Date of Internal Assessment |
|----------------------------------|---------|-------------|---|----------------|---------------------|----------------------------------|
| JULY' 2019 to JAN' 2020 | SEM- I | BMG1CC1A | Limit and its examples, continuity, derivative, successive derivative, partial derivative etc. | 20 | Mr. Palash Sadhu | |
| | | | Curvature, polar coordinates, Tangent, normal, asymptotes, etc. | 15 | Mr. Palash Sadhu | 1st week of December, 2019 |
| | | | Rolle's theorem, Mean value theorems, etc. up to Maxima and Minima, intermediate forms. | 25 | Mr. Palash Sadhu | |
| | SEM-III | BMG3CC1C | Introduction of sets, Suprema, infima and some examples, Bolzano Weierstrass theorem and some application | 15 | Mr. Palash Sadhu | |
| | | | Sequence, some theorem and some examples | 15 | Mr. Palash Sadhu | 3rd week of Dec. 2019 |
| | | | Series of numbers, properties, examples | 15 | Mr. Palash Sadhu | |
| | | | Sequences and series of functions | 15 | Mr. Palash Sadhu | |
| | SEM-V | | Vector space, subspaces, examples, Basis, dimension etc. | 20 | Mr. Palash Sadhu | |
| | | BMC5DSE1 42 | Linear transformations, Algebra of Linear Transformation, etc. | 15 | Mr. Palash Sadhu | 2 nd week of Dec. |
| | | BMG5DSE1A3 | Dual space, dual basis, Eigenvalue, eigenvectors | 15 | Mr. Palash Sadhu | 2019 |
| | | 7 | Isomorphism theorems, Invertibility and isomorphism | 10 | Mr. Palash Sadhu | |
| | | BMG5SEC31 | Sample space, probability axioms, up to mathematical expectations and moment generating function of continuous and discrete distributions, etc. | 20 | Mr. Palash Sadhu | 2 nd week of Dec.2019 |
| | | | Joint cumulative distribution function and its properties, up to independent random variables, etc. | 20 | Mr. Palash Sadhu | |

EVEN SEMESTER

| Academic | Class | Paper | Topic to be covered | No of | Name of the teacher | Date of Internal | |
|---------------------|--------|-------------|--|----------|----------------------------------|----------------------|--|
| Period | | | | lectures | | Assessment | |
| FEB' 20 to JUNE' | | | 1st order Differential equation, I.F., etc. | 10 | Dr. Amrita Das | | |
| 20 | SEM-II | BMG2CC1B | Higher order differential equations etc. | 10 | Dr. Amrita Das | 1st week of May, | |
| | | | Linear homogeneous diff. eqn. etc. | 16 | Mr. Palash Sadhu | 2020 | |
| | | | Non linear P.D.E., Lagrange's method etc. | 24 | Dr. Amrita Das | | |
| | SEM-IV | IV BMG4CC1D | Group, properties and examples | 12 | Dr. Amrita Das | | |
| | | | Subgroup, cyclic subgroup, normal subgroup etc. | 12 | Dr. Amrita Das | 1st week of May, | |
| | | | Rings, properties and examples etc. | 12 | Dr. Amrita Das | 2020 | |
| | | | Fields, properties and examples etc. | 12 | Mr. Palash Sadhu | 1 | |
| | SEM-VI | BMG6DSE1B3 | Linear programming problem, graphical method etc. | 10 | Mr. Palash Sadhu | | |
| | | | Convex sets, properties etc. | 12 | Dr. Amrita Das | 1st week of May, | |
| | | | Simplex method etc. | 13 | Dr. Amrita Das | 2020 | |
| | | | Duality theory etc. | 12 | Mr. Palash Sadhu | 1 | |
| | | BMG6SEC42 | Transportation and assignment problems Game theory | 25 15 | Dr. Amrita Das Dr. Amrita Das | 1st week of May,2020 | |

POLBA MAHAVIDYALAYA

Implementation of Departmental Lesson Plan 2019-2020

Name of the Department: Mathematics Name of the Programme: B.Sc. (General)

Name of the Course: Mathematics

Period of the Lesson Plan: 1^{st} July $2019-30^{th}$ June 2020

ODD SEMESTER

| Academic | Class | Paper | Topic covered | Topic not covered | Reason | Date of | Remarks |
|------------------------|---------|------------|--|-------------------|--------------------|------------------------|---------|
| Period | | | | | for not covered | Internal Assessment | |
| July' 19 to Jan' 20 | SEM-I | BMG1CC1A | Limi and its examples, continuity, derivative, successive derivative, partial derivative, etc. Curvature, polar coordinates, etc. Tangent, normal, asymptotes, etc. Mean value theorems, etc. | N/A | N/A | 16/12/2019 | |
| | SEM-III | BMG3CC1C | Introduction of sets, Suprema, infima and some examples, Bolzano Weierstrass theorem and some application Sequence, some theorem and some examples Series of numbers, properties, examples Sequences and series of functions | N/A | N/A | 13/12/2019 | |
| | SEM-V | BMG5DSE1A3 | Vector space, subspaces, examples Linear transformations Dual space, dual basis Isomorphism theorems | N/A | N/A | 03/12/2019 | |
| | | BMG5SEC33 | Sample space, probability axioms, up to mathematical expectations and moment generating function of continuous and discrete distributions, etc. Joint cumulative distribution function and its properties, up to independent random variables, etc. | N/A | N/A | 05/12/2019 | |

EVEN SEMESTER

| Academic | Class | Paper | Topic covered | Topic not | Reason for | Date of | Remarks |
|------------------------|--------|------------|--|-----------|----------------|------------------------|---------|
| Quarter | | | | covered | not covered | Internal Assessment | |
| Feb' 20 to June' 20 | SEM-II | BMG2CC1B | 1st order Differential equation, I.F., etc. Higher order differential equations etc. Linear homogeneous diff. eqn. etc. Non linear P.D.E., Lagrange's method etc | N/A | N/A | 16/05/2020 | |
| | SEM-IV | BMG4CC1D | Group, properties and examples, Subgroup, cyclic subgroup, normal subgroup etc. Rings, properties and examples etc. Fields, properties and examples etc. | N/A | N/A | 12/05/2020 | |
| | SEM-VI | BMG6DSE1B3 | Linear programming problem, graphical method etc. Convex sets, properties etc. Simplex method etc. Duality theory etc. | N/A | N/A | 02/05/2020 | |
| | | BMG6SEC42 | Transportation and assignment problems Game theory | N/A | N/A | 05/05/2020 | |

Sd/-HOD