Name of the Teacher: Babita Bist

Class: B.Sc-5th Semester

**Lesson Plan**

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| **S No** | **Period** | **Topics to be Covered** | **Academic Activity to be Organized** |
|  | **17-31 July 2017** | **Finite Differnce Operators and their relations,** Interpolation with equal intervals |  |
|  | **01-31 Aug 2017** | Interpolation with unequal intervals, Central Differences, Probability distribution (Binomial distribution, Poisson’s distribution) |  |
|  | **01-30 Sept 2017** | Probability distribution ( Normal distribution), Numerical Differentiation, Eigen Value Problems | **Class test** |
|  | **01-31 Oct 2017** | Numerical Integration, Numerical solution of ordinary differential equations (Taylor’s series method, Euler’s method, Modified Euler’s method, Runge-Kutta Methods) | **Surprise Test** |
|  | **01-13 Nov 2017** | Picard’s method, Predictor-corrector methods | **Discussion on Last Year’s Question Papers** |

**Topics of Assignments/ Class Tests to be given to the Students:**

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| **Assignment 1** | **No Assessment so not required** |
| **Assignment 2** |
| **Class Test** |

Class: B.Sc-3rd Semester

**Lesson Plan**

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| **S No** | **Period** | **Topics to be Covered** | **Academic Activity to be Organized** |
|  | **17-31 July 2017** | **Composition and resolution of force** |  |
|  | **01-31 Aug 2017** | **Parallel forces, Moments , couples, Analytical conditions of equilibrium of coplanar forces** | **Surprise Test** |
|  | **01-30 Sept 2017** | **Virtual work, Forces in 3D, Poinsot’s central axis, Wrenches** | **Assignment-1,** |
|  | **01-31 Oct 2017** | **Null lines and Planes, Friction , Centre of gravity** | **Class Test , Assignment-2** |
|  | **01-13 Nov 2017** | **Stable and unstable equilibrium** | **Discussion on Last Year’s Question Papers** |

**Topics of Assignments/ Class Tests to be given to the Students:**

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| **Assignment 1** | **Analytical conditions of equilibrium of coplanar forces** |
| **Assignment 2** | **Friction, Forces in 3D** |
| **Class Test** | **Analytical conditions of equilibrium of coplanar forces, Composition and resolution of force** |

Class: B.Sc- 1st Semester (sec A + B)

**Lesson Plan**

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| **S No** | **Period** | **Topics to be Covered** | **Academic Activity to be Organized** |
|  | **17-31 July 2017** | Sphere: Plane section of a sphere. Sphere through a given circle |  |
|  | **01-31 Aug 2017** | Intersection of two spheres, radical plane of two spheres. Co-oxal system of spheres Cones. Right circular cone, enveloping cone and reciprocal cone. Cylinder: Right circular cylinder and enveloping cylinder, Central Conicoids | **Board Test** |
|  | **01-30 Sept 2017** | Central Conicoids: Equation of tangent plane. Director sphere. Normal to the conicoids. Polar plane of a point. Enveloping cone of a coincoid. Enveloping cylinder of a coincoid, Paraboloids: Circular section, Plane sections of conicoids, Generating lines. | **Assignment-1,** |
|  | **01-31 Oct 2017** | General equation of second degree. Tracing of conics. Tangent at any point to the conic, chord of contact, pole of line to the conic, director circle of conic. System of conics. Confocal conics. Polar equation of a conic, tangent and normal to the conic | **Class Test , Assignment-2** |
|  | **01-13 Nov 2017** | Reduction of second degree equations, Confocal conicoid | **Discussion on Last Year’s Question Papers** |

**Topics of Assignments/ Class Tests to be given to the Students:**

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| **Assignment 1** | **Sphere** |
| **Assignment 2** | **The Conicoid** |
| **Class Test** | **Sphere** |

Class: B.Sc- 1st Semester (sec C)

**Lesson Plan**

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| **S No** | **Period** | **Topics to be Covered** | **Academic Activity to be Organized** |
|  | **17-31 July 2017** | General equation of second degree |  |
|  | **01-31 Aug 2017** | General equation of second degree, Tracing of conics. Tangent at any point to the conic, chord of contact, pole of line to the conic, director circle of conic |  |
|  | **01-30 Sept 2017** | System of conics , Polar equation of a conic, tangent and normal to the conic | **Assignment-1,** |
|  | **01-31 Oct 2017** | Central Conicoids: Equation of tangent plane. Director sphere. Normal to the conicoids. Polar plane of a point. Enveloping cone of a coincoid. Enveloping cylinder of a coincoid | **Class Test , Assignment-2** |
|  | **01-13 Nov 2017** | Paraboloids: Circular section |  |

**Topics of Assignments/ Class Tests to be given to the Students:**

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| **Assignment 1** | **Sphere** |
| **Assignment 2** | **The Conicoid** |
| **Class Test** | **Sphere** |