

**Dr. Jitu Sarmah. Teaching Plane.**

**Dept. Mathematics. Odd & Even Semester.**

| Class/<br>semester          | Title&Code of<br>the<br>paper(credit)                                                  | Method of<br>teaching                            | Teaching<br>Material                       | Unit                     | Topic                                                                 | Period/<br>Hours<br>Requir<br>ed | Detail of the<br>content                                                                                                    | Remark/Books                                            |
|-----------------------------|----------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------------------------|--------------------------|-----------------------------------------------------------------------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| Sem. I<br><br>(Commerc<br>) | Basic Analysis.<br>MTMHJ-<br>011(8Cd 4)<br>ValueAdded<br>course.<br>DTNVA-011(Cd<br>2) | Lecturer<br>using<br>chock and<br>black<br>board | Textbook<br>chock<br>and<br>black<br>board | IV<br><br>I&II           | Infinite<br>series<br><br>Numeric<br>al<br>Literacy                   | 15<br><br>32                     | Convergence,<br>Divergence<br><br>Ratio<br>&proportion,<br>selling &gain<br>price etc.                                      | S.C. Malik<br>Real Analysis<br><br>Basic number system. |
| Sem. II                     | Calculus &<br>ODE. MTHMJ-<br>021(cd 4)                                                 | Lecturer<br>using<br>chock and<br>black<br>board | Textbook<br>chock<br>and<br>black<br>board | I&II                     | Complex<br>number                                                     | 25                               | Poler system<br>, hyperbolic<br>system, D<br>Moivers<br>theorem &<br>Application                                            | B.C.Das & Mukharjee,<br>Higher Trigonometric            |
| Sem. III                    | Group theory.<br>MTHMJ-<br>033(Cd. 4)                                                  | Lecturer<br>using<br>chock and<br>black<br>board | Textbook<br>chock<br>and<br>black<br>board | II&V                     | Group<br>theory                                                       | 30                               | Subgroup,<br>normal<br>subgroup                                                                                             | J.K. Fraleighh. A first<br>coursein abstract<br>algebra |
|                             | Ring theory &<br>linear algebra.<br>MTHMJ-044<br>Business<br>Mathematics<br>COMMJ-042  | Lecturer<br>using<br>chock and<br>black<br>board | Textbook<br>chock<br>and<br>black<br>board | I&II<br><br>III,IV,<br>V | Ring<br>theory<br><br>Different<br>ial<br>& Int.<br>Calculus<br>L.P.P | 27<br><br>35                     | Definition<br>,property<br>Application,<br>Ideal.<br>Partial Diff.&<br>Standard<br>Inte.<br>Graffical &<br>Simplex<br>methd | M. Artin. Abs<br>tract Algebra                          |
| Sem V                       | L.P.P<br>MTHMJ-054                                                                     | Lecturer<br>using<br>chock and<br>black<br>board | Textbook<br>chock<br>and<br>black<br>board | III&I<br>V               | Duality<br>theory ,<br>Transfor<br>mation<br>problem                  | 38                               | Duality<br>theory ,<br>Transformati<br>on problem                                                                           | S.D.Sharma, Operation<br>Research.                      |
| Sem. VI                     | Mathematical<br>method<br>MTHMJ-064                                                    | Lecturer<br>using<br>chock and                   | Textbook<br>chock<br>and                   | IV, V                    | Fourier<br>Transfor<br>mation,                                        | 35                               | Fourier<br>Transformati<br>on, Laplace                                                                                      | Fourier series<br>&Integral<br>transformation. S.       |

|                 |                                                  |                                      |                                |                     |                                    |    |                                                                                                                        |                                                                                                          |
|-----------------|--------------------------------------------------|--------------------------------------|--------------------------------|---------------------|------------------------------------|----|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
|                 |                                                  | black board                          | black board                    |                     | Laplace transformation             |    | transformation. And their Application                                                                                  | Sreenadh,S.Ranganatham,M.V.S.S.N.Prasad & V.R.Babu.                                                      |
| P.G. Sem.I      | Special function & P.D.E PMTHD-101(B)            | Lecturer using chock and black board | Textbook chock and black board | III& IV             | Wave equation Diffusion Equation   | 20 | Wave equation (hyperbolic) Diffusion Equation (perbolic)                                                               | Special function of Mathematics, Elements of P.D.E. Mcgraw Hill. I.N. Sneddon.                           |
| P.G. Sem. II    | Mechanics & Tensor. PMTHC-203                    | Lecturer using chock and black board | Textbook chock and black board | I,II,III .IV,V , VI | Mechanics & Tensor                 | 40 | Motion in 3-D.Impulsiv Motion. Motion of a rigid body. Generalized coordinate. Transformati on law. Covariant Derivate | S.L.Loney. Element of STATICS &Dynamics, Part -II C.E.Weatherburn. Riemannian geometry &Tensor Calculus. |
| P.G. Sem. III   | Hydrodynamics &Continuum Mechanics PMTHD- 301(B) | Lecturer using chock and black board | Textbook chock and black board | I,II,III            | Hydrodynamics                      | 19 | Kinematics of Fluid in motion. Motion in a Plane. Vortex motion                                                        | W.H.Besant& A.S. Ramsay. A Treatise on Hydrodynamics Part II                                             |
| Sem. II (Minor) | Calculus & O.D.E. MTHMI-021                      | Lecturer using chock and black board | Textbook chock and black board | I                   | Complex number                     | 10 | De Moivers Theorem. Hyperbolic function                                                                                | Higher Trigonometry. D.C.Das &B.N. Mukharjee.                                                            |
| Sem. I (Minor)  | Basic Analysis &Algebra. MTHMI-011               | Lecturer using chock and black board | Textbook chock and black board | IV                  | Infinite series                    | 15 | Convergence &Divergence Of series                                                                                      | S.C.Malik. Mathematical Analysis                                                                         |
| Sem. IV(Minor)  | Coordinate Geometry & Abstract Algebra MTHMI-041 | Lecturer using chock and black board | Textbook chock and black board | IV                  | Sphere, cone, cyllender, conicoi d | 17 | Sphere, cone, cyllender, conicoid                                                                                      | B. Das, Analytical Geometry& Vector Analysis                                                             |