# RPS Degree College, Balana (Mahendergarh)

**Lesson Plan**

2019-20(Even Semester)

**Class and Section:** M.Sc.(Math) - 4th Sem.(A & B)

**Subject:** Inner Product Spaces and Measure Theory(18MAT24CC1)

**Name of the Faculty : Naresh Kumar**

| Week | Lecture | Date | Topics |
|---|---|---|---|
| 1 | 1 | 16-Jan-20 | Subject History & Progress |
| | 2 | 17-Jan-20 | Subject History & Progress |
| 2 | 3 | 20-Jan-20 | Introduction to Syllabus, Scheme of Exam & Learning Objectives/Outcomes |
| | 4 | 21-Jan-20 | Test to Check the Learning Level of the Students |
| | 5 | 22-Jan-20 | Hilbert Spaces |
| | 6 | 23-Jan-20 | Inner product spaces |
| | 7 | 24-Jan-20 | Inner product spaces |
| 3 | 8 | 27-Jan-20 | Schwarz's inequality |
| | 9 | 28-Jan-20 | Schwarz's inequality |
| | 10 | 29-Jan-20 | Hilbert space as normed linear space |
| | 11 | 30-Jan-20 | Hilbert space as normed linear space |
| | 12 | 31-Jan-20 | Convex sets in Hilbert spaces |
| 4 | 13 | 03-Feb-20 | Projection theorem |
| | 14 | 04-Feb-20 | Projection theorem |
| | 15 | 05-Feb-20 | Orthonormal sets |
| | 16 | 06-Feb-20 | Separability |
| | 17 | 07-Feb-20 | Total Orthonormal sets |
| 5 | 18 | 10-Feb-20 | Total Orthonormal sets |
| | 19 | 11-Feb-20 | Bessel's inequality |
| | 20 | 12-Feb-20 | Bessel's inequality |
| | 21 | 13-Feb-20 | Parseval's identity |
| | 22 | 14-Feb-20 | Conjugate of a Hilbert space |
| 6 1st Class Test 17-20th Feb. 2020 | 23 | 17-Feb-20 | Conjugate of a Hilbert space |
| | 24 | 18-Feb-20 | Riesz representation theorem in Hilbert spaces |
| | 25 | 19-Feb-20 | **Test** |
| | 26 | 20-Feb-20 | Riesz representation theorem in Hilbert spaces |
| 7 | 27 | 24-Feb-20 | Adjoint of an operator on a Hilbert space |
| | 28 | 25-Feb-20 | Reflexivity of Hilbert space |
| | 29 | 26-Feb-20 | Self-adjoint operators |
| | 30 | 27-Feb-20 | Positive operators |
| | 31 | 28-Feb-20 | Product of Positive Operators |
| 8 | 32 | 02-Mar-20 | Projection operators |
| | 33 | 03-Mar-20 | Product of Projections |
| | 34 | 04-Mar-20 | Sum and Difference of Projections |
| | 35 | 05-Mar-20 | Normal and unitary operators |
| | 36 | 06-Mar-20 | Projections on Hilbert space |
| 9 | 37 | 09-Mar-20 | Spectral theorem on finite dimensional space |
| | 38 | 11-Mar-20 | Measure space |
| | 39 | 12-Mar-20 | Generalized Fatou's lemma |
| | 40 | 13-Mar-20 | Generalized Fatou's lemma |
| 10 | 41 | 16-Mar-20 | Measure and outer measure |
| | 42 | 17-Mar-20 | Extension of a measure |
| | 43 | 18-Mar-20 | Caratheodory extension theorem |
| | 44 | 19-Mar-20 | Signed measure |
| | 45 | 20-Mar-20 | Hahn decomposition theorem |
| 11 2nd Class Test 23-27 March 2020 | 46 | 23-Mar-20 | Jordan decomposition theorem |
| | 47 | 24-Mar-20 | Jordan decomposition theorem |
| | 48 | 25-Mar-20 | Mutually signed measure |
| | 49 | 26-Mar-20 | **Test** |
| | 50 | 27-Mar-20 | Radon-Nikodym theorem |
| 12 | 51 | 30-Mar-20 | Lebesgue decomposition |
| | 52 | 31-Mar-20 | Lebesgue-Stieltjes integral |
| | 53 | 01-Apr-20 | Product measures |
| | 54 | 03-Apr-20 | Fubini's theorem |
| 13 | 55 | 06-Apr-20 | Baire sets |
| | 56 | 07-Apr-20 | Baire measure |
| | 57 | 08-Apr-20 | Continuous functions with compact support |
| | 58 | 09-Apr-20 | Revision |
| | 59 | 10-Apr-20 | Revision |
| 14 | 60 | 13-Apr-20 | Revision |
| | 61 | 14-Apr-20 | Revision |
| | 62 | 15-Apr-20 | Revision |
| | 63 | 16-Apr-20 | Revision |
| | 64 | 17-Apr-20 | Revision |
| 15 | **20th - 24th April 20** | | Final Sessional Test |

# RPS Degree College, Balana (Mahendergarh)

**Lesson Plan**

2019-20(Even Semester)

**Class and Section:** M.Sc.(Math) - 2nd Sem.(B)
**Subject: Integral Equation & Valculus of Variation**(MAT-203)
**Name of the Faculty :** Dr. Parveen Kumar Gaur

| Week | Lecture | Date | Topics |
|---|---|---|---|
| 1 | 1 | 16-Jan-20 | Subject History & Progress |
| | 2 | 17-Jan-20 | |
| 2 | 3 | 20-Jan-20 | Introduction to Syllabus, Scheme of Exam & Learning Objectives/Outcomes |
| | 4 | 21-Jan-20 | Test to Check the Learning Level of the Students |
| | 5 | 22-Jan-20 | Linear Integral equations |
| | 6 | 23-Jan-20 | Some basic identities |
| | 7 | 24-Jan-20 | Initial value problems reduced to Volterra integral equations |
| 3 | 8 | 27-Jan-20 | |
| | 9 | 28-Jan-20 | Methods of successive substitution |
| | 10 | 29-Jan-20 | Successive approximation to solve Volterra integral equations |
| | 11 | 30-Jan-20 | |
| | 12 | 31-Jan-20 | Iterated kernels and Neumann series for Volterra equations |
| 4 | 13 | 03-Feb-20 | |
| | 14 | 04-Feb-20 | Resolvent kernel as a series |
| | 15 | 05-Feb-20 | |
| | 16 | 06-Feb-20 | Laplace transform method for a difference kernel |
| | 17 | 07-Feb-20 | |
| 5 | 18 | 10-Feb-20 | Solution of a Volterra integral equation of the first kind |
| | 19 | 11-Feb-20 | |
| | 20 | 12-Feb-20 | Boundary value problems reduced to Fredholm integral equations |
| | 21 | 13-Feb-20 | |
| | 22 | 14-Feb-20 | Methods of successive approximation |
| 6 1st Class Test 17-20th Feb. 2020 | 23 | 17-Feb-20 | Methods of successive approximation |
| | 24 | 18-Feb-20 | Successive substitution to solve Fredholm equations Second kind |
| | 25 | 19-Feb-20 | **Test** |
| | 26 | 20-Feb-20 | Successive substitution to solve Fredholm equations Second kind |
| 7 | 27 | 24-Feb-20 | Iterated kernels and Neumann series for Fredholm equations |
| | 28 | 25-Feb-20 | |
| | 29 | 26-Feb-20 | Resolvent kernel as a sum of series |
| | 30 | 27-Feb-20 | |
| | 31 | 28-Feb-20 | Fredholm resolvent kernel as a ratio of two series |
| 8 | 32 | 02-Mar-20 | |
| | 33 | 03-Mar-20 | Fredholm equations with separable kernels |
| | 34 | 04-Mar-20 | |
| | 35 | 05-Mar-20 | Approximation of a kernel by a separable kernel |
| | 36 | 06-Mar-20 | |
| 9 | 37 | 09-Mar-20 | Fredholm Alternative |
| | 38 | 11-Mar-20 | Non homogeneous Fredholm equations with degenerate kernels |
| | 39 | 12-Mar-20 | |
| | 40 | 13-Mar-20 | Green's function |
| 10 | 41 | 16-Mar-20 | Use of method of variation of parameters to construct the Green's function for a non-homogeneous linear second order boundary value problem |
| | 42 | 17-Mar-20 | |
| | 43 | 18-Mar-20 | |
| | 44 | 19-Mar-20 | Basic four properties of the Green's function |
| | 45 | 20-Mar-20 | Alternate procedure for construction of the Green's function by |
| 11 2nd Class Test 23-27 March 2020 | 46 | 23-Mar-20 | Reduction of a boundary value problem to a Fredholm integral equation with kernel as Green's function |
| | 47 | 24-Mar-20 | |
| | 48 | 25-Mar-20 | **Test** |
| | 49 | 26-Mar-20 | Hilbert-Schmidt theory for symmetric kernels |
| | 50 | 27-Mar-20 | |
| 12 | 51 | 30-Mar-20 | Motivating problems of calculus of variations |
| | 52 | 31-Mar-20 | Shortest distance |
| | 53 | 01-Apr-20 | Minimum surface of resolution |
| | 54 | 03-Apr-20 | Brachistochrone problem |
| 13 | 55 | 06-Apr-20 | Isoperimetric problem |
| | 56 | 07-Apr-20 | Geodesics |
| | 57 | 08-Apr-20 | Fundamental lemma of calculus of variations |
| | 58 | 09-Apr-20 | Euler's equation for one dependant function and its generalization to 'n' dependant functions and to higher order derivatives |
| | 59 | 10-Apr-20 | |
| 14 | 60 | 13-Apr-20 | Conditional extremum under geometric constraints and under integral constraints |
| | 61 | 14-Apr-20 | |
| | 62 | 15-Apr-20 | Revision |
| | 63 | 16-Apr-20 | Revision |
| | 64 | 17-Apr-20 | Revision |
| 15 | | 20th to 24th April 20 | Final Semester Test |

# RPS Degree College, Balana (Mahendergarh)

**lesson plan session (2019 -20)**

**Class and Section: MSc (Math)4th**

**Subject: Viscous fluid dynamics**

**Name of the Faculty : Sunil Kumar**

| Week | Lecture | Date | Topics |
|---|---|---|---|
| 1 | 7 | 16/01/20 to 24/01/20 | vorticity in two dimensions.circular and rectilinear vortices, vortex doublet, Images, motion due to vortices. |
| 2 | 5 | 27/01/20 to 31/01/20 | Single and double infinite rows of vortices.karman vortex street,wave motion in a gas.speed of sound in gas, |
| 3 | 5 | 03/02/20 to 07/02/20 | Equation of motion of a gas.subsonic ,sonic and supersonic flows.Isentropic gas flow,flow through a nozzle. |
| 4 | 5 | 10/02/20 to 14/02/20 | Stress components in a real fluid,Relation between Cartesian components of stress.Translational motion of fluid element.Rates of strain.Transformation of rates of strain. |
| 5 | 5 | 17/02/20 to 21/02/20 | Relation between stresses and and rates of strain.The coefficient of viscosity and laminar flow.Navier stoke equation of motion.Equation of motion in cylindrical and spherical polar coordinates. |
| 6 | | | 1st Class Test |
| 7 | 5 | 24/02/20 to 28/02/20 | Equation of energy.Diffusion of vorticity.Energy dissipation due to viscosity.Equation of state. |
| 8 | 5 | 02/03/20 to 06/03/20 | plain poiseuille and couette flows between two parallel plates.Theory of lubrication.Hagen poiseuille flow.Steady flow between co axial circular cylinder and concentric rotating cylinder. |
| 9 | 5 | 09/03/20 to 13/03/20 | Flow through tubes of a uniform elliptic and equilateral triangular cross section.Unsteady flow over a flate plate.Steady flow past a fixed sphere.Floow in convergent and divergent chennals. |
| 10 | | | 2nd Class Test |
| 11 | 5 | 16/03/20 to 20/03/20 | Dynamical similarity.Inspection analysis.Non dimensional number. Dimensional analysis. |
| 12 | 5 | 23/03/20 to 27/03/20 | Buckingham p-theorem and it's application.prandtl boundary layer.Boundary layer equation in two dimensions. |
| 13 | 5 | 06/04/20 to 10/04/20 | the boundary layer on a flate plate.Characteristic boundary layer parameters.karman integral condition.karman pohlhausen method. |
| 14 | 5 | 30/03/20 to 03/04/20 | |
| 15 | 5 | 13/04/20 to 17/04/20 | |
| 16 | | | Final Sessional Test |

# RPS Degree College, Balana (Mahendergarh)

**Lesson Plan**

2019-20(Even Semester)

**Class and Section:** M.Sc.(Math) - 4th Sem.(A)
**Subject:** Advance Complex Analysis(18MAT24DE1)
**Name of the Faculty :** Dr. Parveen Kumar Gaur

| Week | Lecture | Date | Topics |
|---|---|---|---|
| 1 | 1 | 16-Jan-20 | Subject History & Progress |
| | 2 | 17-Jan-20 | Subject History & Progress |
| 2 | 3 | 20-Jan-20 | Introduction to Syllabus, Scheme of Exam & Learning Objectives/Outcomes |
| | 4 | 21-Jan-20 | Test to Check the Learning Level of the Students |
| | 5 | 22-Jan-20 | Integral Functions |
| | 6 | 23-Jan-20 | Factorization of an Integral function |
| | 7 | 24-Jan-20 | Weierstrass Primary factors |
| 3 | 8 | 27-Jan-20 | Weierstrass factorization theorem |
| | 9 | 28-Jan-20 | Gamma function and its properties |
| | 10 | 29-Jan-20 | Gamma function and its properties |
| | 11 | 30-Jan-20 | Gamma function and its properties |
| | 12 | 31-Jan-20 | Stirling formula |
| 4 | 13 | 03-Feb-20 | Integral version of Gamma function |
| | 14 | 04-Feb-20 | Riemann Zeta function |
| | 15 | 05-Feb-20 | Riemann functional equation |
| | 16 | 06-Feb-20 | Mittag-Leffler theorem |
| | 17 | 07-Feb-20 | Runge theorem |
| 5 | 18 | 10-Feb-20 | Analytical Continuation |
| | 19 | 11-Feb-20 | Natural Boundary |
| | 20 | 12-Feb-20 | Uniqueness of direct analytic continuation |
| | 21 | 13-Feb-20 | Uniqueness of analytic continuation along a curve |
| | 22 | 14-Feb-20 | Power series method of analytic continuation |
| 6 1st Class Test 17-20th Feb. 2020 | 23 | 17-Feb-20 | Schwarz Reflection principle |
| | 24 | 18-Feb-20 | Germ of an analytic function |
| | 25 | 19-Feb-20 | **Test** |
| | 26 | 20-Feb-20 | Monodromy theorem and its Consequences |
| 7 | 27 | 24-Feb-20 | Harmonic functions on a disk |
| | 28 | 25-Feb-20 | Poisson kernel |
| | 29 | 26-Feb-20 | The Dirichlet problem for a unit disc |
| | 30 | 27-Feb-20 | Harnack inequality |
| | 31 | 28-Feb-20 | Harnack theorem |
| 8 | 32 | 02-Mar-20 | Harnack theorem |
| | 33 | 03-Mar-20 | Dirichlet region |
| | 34 | 04-Mar-20 | Dirichlet region |
| | 35 | 05-Mar-20 | Green function |
| | 36 | 06-Mar-20 | Green function |
| 9 | 37 | 09-Mar-20 | Canonical product |
| | 38 | 11-Mar-20 | Jensen formula |
| | 39 | 12-Mar-20 | Poisson-Jensen formula |
| | 40 | 13-Mar-20 | Hadamard three circles theorem |
| 10 | 41 | 16-Mar-20 | Hadamard three circles theorem |
| | 42 | 17-Mar-20 | Growth and order of an entire function |
| | 43 | 18-Mar-20 | Growth and order of an entire function |
| | 44 | 19-Mar-20 | An estimate of number of zeros |
| | 45 | 20-Mar-20 | An estimate of number of zeros |
| 11 2nd Class Test 23-27 March 2020 | 46 | 23-Mar-20 | Exponent of convergence |
| | 47 | 24-Mar-20 | Borel theorem |
| | 48 | 25-Mar-20 | Hadamard factorization theorem |
| | 49 | 26-Mar-20 | **Test** |
| | 50 | 27-Mar-20 | The Range of an Analytic function |
| 12 | 51 | 30-Mar-20 | The Range of an Analytic function |
| | 52 | 31-Mar-20 | Bloch theorem |
| | 53 | 01-Apr-20 | Bloch theorem |
| | 54 | 03-Apr-20 | Schottky theorem |
| 13 | 55 | 06-Apr-20 | Little Picard theorem |
| | 56 | 07-Apr-20 | Little Picard theorem |
| | 57 | 08-Apr-20 | Montel Caratheodory theorem |
| | 58 | 09-Apr-20 | Great Picard theorem |
| | 59 | 10-Apr-20 | Univalent functions |
| 14 | 60 | 13-Apr-20 | Bieberbach conjecture |
| | 61 | 14-Apr-20 | Bieberbach conjecture |
| | 62 | 15-Apr-20 | The 1/4 theorem |
| | 63 | 16-Apr-20 | The 1/4 theorem |
| | 64 | 17-Apr-20 | Revision |

# RPS Degree College, Balana (Mahendergarh)

**Lesson Plan**

2020-21 (Even Semester)

**Class and Section: M.Sc. Math 4th sem A**

**Subject: Graph Theory**

**Name of the Faculty : Hansraj**

| Week | Lecture | Date | Topics |
|---|---|---|---|
| 1 | 7 | 16/01/20 to 24/01/20 | Definition and types of graphs, Walks, Paths and Circuits |
| 2 | 5 | 27/01/20 to 31/01/20 | Connected and Disconnected graphs, Applications of graphs, |
| 3 | 5 | 03/02/20 to 07/02/20 | Connected and Disconnected graphs, Applications of graphs, |
| 4 | 5 | 10/02/20 to 14/02/20 | Eulerian and Hamiltonian paths, Shortest Path in a Weighted Graph |
| 5 | 5 | 17/02/20 to 21/02/20 | The Travelling Sales person Problem, Planar Graphs, |
| 6 | | | 1st Class Test |
| 7 | 5 | 24/02/20 to 28/02/20 | The Travelling Sales person Problem, Planar Graphs, |
| 8 | 5 | 02/03/20 to 06/03/20 | Directed Graphs, Trees, Tree Terminology, |
| 9 | 5 | 09/03/20 to 13/03/20 | Rooted Labeled Trees, Prefix Code |
| 10 | | | 2nd Class Test |
| 11 | 5 | 16/03/20 to 20/03/20 | Binary Search Tree, Tree Traversal. |
| 12 | 5 | 23/03/20 to 27/03/20 | Spanning Trees and Cut Sets, |
| 13 | 5 | 06/04/20 to 10/04/20 | Minimum Spanning Trees, Kruskal Algorithm |
| 14 | 5 | 30/03/20 to 03/04/20 | Prim Algorithm, Decision Trees, Sorting Methods. |
| 15 | 5 | 13/04/20 to 17/04/20 | Assignments of whole syllabus |
| 16 | | | Final Sessional Test |

# RPS Degree College, Balana (Mahendergarh)

**Lesson Plan**

2019-20(Even Semester)

**Class and Section:** M.Sc.(Math) - 4th Sem.(B)
**Subject:** Advance Complex Analysis(18MAT24DE1)
**Name of the Faculty :** Dr. Parveen Kumar Gaur

| Week | Lecture | Date | Topics |
|---|---|---|---|
| 1 | 1 | 16-Jan-20 | Subject History & Progress |
| | 2 | 17-Jan-20 | Subject History & Progress |
| 2 | 3 | 20-Jan-20 | Introduction to Syllabus, Scheme of Exam & Learning Objectives/Outcomes |
| | 4 | 21-Jan-20 | Test to Check the Learning Level of the Students |
| | 5 | 22-Jan-20 | Integral Functions |
| | 6 | 23-Jan-20 | Factorization of an Integral function |
| | 7 | 24-Jan-20 | Weierstrass Primary factors |
| 3 | 8 | 27-Jan-20 | Weierstrass factorization theorem |
| | 9 | 28-Jan-20 | Weierstrass factorization theorem |
| | 10 | 29-Jan-20 | Gamma function and its properties |
| | 11 | 30-Jan-20 | Gamma function and its properties |
| | 12 | 31-Jan-20 | Stirling formula |
| 4 | 13 | 03-Feb-20 | Integral version of Gamma function |
| | 14 | 04-Feb-20 | Riemann Zeta function |
| | 15 | 05-Feb-20 | Riemann functional equation |
| | 16 | 06-Feb-20 | Mittag-Leffler theorem |
| | 17 | 07-Feb-20 | Runge theorem |
| 5 | 18 | 10-Feb-20 | Analytical Continuation |
| | 19 | 11-Feb-20 | Natural Boundary |
| | 20 | 12-Feb-20 | Uniqueness of direct analytic continuation |
| | 21 | 13-Feb-20 | Uniqueness of analytic continuation along a curve |
| | 22 | 14-Feb-20 | Power series method of analytic continuation |
| 6 1st Class Test 17-20th Feb. 2020 | 23 | 17-Feb-20 | Schwarz Reflection principle |
| | 24 | 18-Feb-20 | Germ of an analytic function |
| | 25 | 19-Feb-20 | **Test** |
| | 26 | 20-Feb-20 | Monodromy theorem and its Consequences |
| 7 | 27 | 24-Feb-20 | Harmonic functions on a disk |
| | 28 | 25-Feb-20 | Poisson kernel |
| | 29 | 26-Feb-20 | The Dirichlet problem for a unit disc |
| | 30 | 27-Feb-20 | Harnack inequality |
| | 31 | 28-Feb-20 | Harnack theorem |
| 8 | 32 | 02-Mar-20 | Harnack theorem |
| | 33 | 03-Mar-20 | Dirichlet region |
| | 34 | 04-Mar-20 | Dirichlet region |
| | 35 | 05-Mar-20 | Green function |
| | 36 | 06-Mar-20 | Green function |
| 9 | 37 | 09-Mar-20 | Canonical product |
| | 38 | 11-Mar-20 | Jensen formula |
| | 39 | 12-Mar-20 | Poisson-Jensen formula |
| | 40 | 13-Mar-20 | Hadamard three circles theorem |
| 10 | 41 | 16-Mar-20 | Hadamard three circles theorem |
| | 42 | 17-Mar-20 | Growth and order of an entire function |
| | 43 | 18-Mar-20 | Growth and order of an entire function |
| | 44 | 19-Mar-20 | An estimate of number of zeros |
| | 45 | 20-Mar-20 | An estimate of number of zeros |
| 11 2nd Class Test 23-27 March 2020 | 46 | 23-Mar-20 | Exponent of convergence |
| | 47 | 24-Mar-20 | Borel theorem |
| | 48 | 25-Mar-20 | **Test** |
| | 49 | 26-Mar-20 | Hadamard factorization theorem |
| | 50 | 27-Mar-20 | The Range of an Analytic function |
| 12 | 51 | 30-Mar-20 | The Range of an Analytic function |
| | 52 | 31-Mar-20 | Bloch theorem |
| | 53 | 01-Apr-20 | Bloch theorem |
| | 54 | 03-Apr-20 | Schottky theorem |
| 13 | 55 | 06-Apr-20 | Little Picard theorem |
| | 56 | 07-Apr-20 | Little Picard theorem |
| | 57 | 08-Apr-20 | Montel Caratheodory theorem |
| | 58 | 09-Apr-20 | Great Picard theorem |
| | 59 | 10-Apr-20 | Univalent functions |
| 14 | 60 | 13-Apr-20 | Bieberbach conjecture |
| | 61 | 14-Apr-20 | Bieberbach conjecture |
| | 62 | 15-Apr-20 | The 1/4 theorem |
| | 63 | 16-Apr-20 | Revision |
| | 64 | 17-Apr-20 | Revision |

# RPS Degree College, Balana (Mahendergarh)

**Lesson Plan**

2020-21 (Even Semester)

**Class and Section: M.Sc. Math 4th sem B**

**Subject: Graph Theory**

**Name of the Faculty : Hansraj**

| Week | Lecture | Date | Topics |
|---|---|---|---|
| 1 | 7 | 16/01/20 to 24/01/20 | Definition and types of graphs, Walks, Paths and Circuits |
| 2 | 5 | 27/01/20 to 31/01/20 | Connected and Disconnected graphs, Applications of graphs, |
| 3 | 5 | 03/02/20 to 07/02/20 | Connected and Disconnected graphs, Applications of graphs, |
| 4 | 5 | 10/02/20 to 14/02/20 | Eulerian and Hamiltonian paths, Shortest Path in a Weighted Graph |
| 5 | 5 | 17/02/20 to 21/02/20 | The Travelling Sales person Problem, Planar Graphs, |
| 6 | | | 1st Class Test |
| 7 | 5 | 24/02/20 to 28/02/20 | The Travelling Sales person Problem, Planar Graphs, |
| 8 | 5 | 02/03/20 to 06/03/20 | Directed Graphs, Trees, Tree Terminology, |
| 9 | 5 | 09/03/20 to 13/03/20 | Rooted Labeled Trees, Prefix Code |
| 10 | | | 2nd Class Test |
| 11 | 5 | 16/03/20 to 20/03/20 | Binary Search Tree, Tree Traversal. |
| 12 | 5 | 23/03/20 to 27/03/20 | Spanning Trees and Cut Sets, |
| 13 | 5 | 06/04/20 to 10/04/20 | Minimum Spanning Trees, Kruskal Algorithm |
| 14 | 5 | 30/03/20 to 03/04/20 | Prim Algorithm, Decision Trees, Sorting Methods. |
| 15 | 5 | 13/04/20 to 17/04/20 | Assignments of whole syllabus |
| 16 | | | Final Sessional Test |