RPS Degree College, Balana (Mahendergarh)

Lesson Plan

2020-21 (Even Semester)

Class and Section: HM 6TH

Subject: DYNAMICS

Name of the Faculty : MR. Surender kumar

Week	Lecture	Date	Topics
1	7	16/01/20 to 24/01/20	Components of velocity and accelerations . Examples and exercise problems. Radial and transverse components of velocity and accelerations. Examples and exercise problems.
2	5	27/01/20 to 31/01/20	vector form of radial and transverse velocity and accelerations. Tangential and normal components of velocity and acceleration. Vector form. Examples and exercise problems.
3	5	03/02/20 to 07/02/20	Relative motion: relative velocity ,magnittude and direction. Relative Acceleration.Simple harmonic motion , periodic motion,frequency , examples and exercise problems.Elastic strings : Horizantal elastic string
4	5	10/02/20 to 14/02/20	Vertical elastic string.Newton law of motions :first ,second and third law of motion.examples, exercise problems.Pressure of body resting ona horizontal plane moving vertically upwords or downwords.Examples and Exercise.
5	5	17/02/20 to 21/02/20	Work , Power and Energy .Definitions of Conservative forces and impulsive forces.Examples and Exercise problems Doubt discussion.
6			1st Class Test
7	5	24/02/20 to 28/02/20	Motion on smooth and rough plane curves : Motion on the ouside and inside of a vertical circle. Cycloid motion : motion on a cycloid.Motion on a rough curve under gravity.
8	5	02/03/20 to 06/03/20	Projectile: Motion of prtojectile Latus rectum , vertex,focus,directrix,axis of the trajectory of a projectile.
9	5	09/03/20 to 13/03/20	Time of flight , horizantal range and greatest height of a projectile.Examples and exercise problems.
10			2nd Class Test
11	5	16/03/20 to 20/03/20	Velocity at any point of the trajectory.Range and time of flight on an inclined plane.Differential equation of centrsal orbit.
12	5	23/03/20 to 27/03/20	Elliptic ,hyperbolic and parabolic orbit.Examples and exercise problems. Doubt discussion.
13	5	06/04/20 to 10/04/20	Keplers law of motions:Theorems ,motion under the inverse square law .Examples and Exercise problems.
14	5	30/03/20 to 03/04/20	Motion of a particle in three dimension . Revision
15	5	13/04/20 to 17/04/20	Revision
16			Final Sessional Test

RPS Degree College, Balana (Mahendergarh)

Lesson Plan

2020-21 (Even Semester)

Class and Section: Honors Mathematics 6th sem

Subject: Operation research

Name of the Faculty : Ajay

Week	Lecture	Date	Topics
1	7	16/01/20 to 24/01/20	Inventory Control: introduction of inventory, factors affecting inventory,
2	5	27/01/20 to 31/01/20	Inventory models, Deterministic models: Economic order quantity model when shortages are allowed/not allowed,
3	5	03/02/20 to 07/02/20	price discounts model, multi-item inventory models.
4	5	10/02/20 to 14/02/20	Queuing Theory : Basic characteristics of queuing system, Birth-death equations
5	5	17/02/20 to 21/02/20	Steady state solution of Markovian queuing models with single and multiple servers (M/M/1 and M/M/c)
6			1st Class Test
7	5	24/02/20 to 28/02/20	Steady state solution of Markovian queuing models with single and multiple servers with limited capacity (M/M/1/K and M/M/c/K)
8	5	02/03/20 to 06/03/20	Sequencing problems: Processing of n jobs through 2 machines, n jobs through 3 machines, 2 jobs through m machines, n jobs through m machines.
9	5	09/03/20 to 13/03/20	Replacement problems: Replacement of items whose running cost increases with time
10			2nd Class Test
11	5	16/03/20 to 20/03/20	Replacement policies for the items that fail completely - Individual and the group replacement policies.
12	5	23/03/20 to 27/03/20	PERT and CPM: Introduction of PERT and CPM,
13	5	06/04/20 to 10/04/20	Earliest and latest times, Determination of critical path and various types of floats
14	5	30/03/20 to 03/04/20	Probablistic and cost considerations in project scheduling
15	5	13/04/20 to 17/04/20	Assignment of whole syllabuss
16			Final Sessional Test

RPS Degree College, Balana (Mahendergarh)

Class and Section:B.Sc(N.M.) 6th semester section C , Honors Math 6th

Subject: Real and Complex Analysis

Name of the Faculty :Mr. Arvind

Week	Lecture	Date	Topics
1	7	16/01/20 to 24/01/20	Basics of partial derivatives, Definition of Jcobians and Jcobians of functions with respect to two or more variables
2	5	27/01/20 to 31/01/20	problems of Jcobians
3	5	03/02/20 to 07/02/20	Beta and Gamma functions and related problem
4	5	10/02/20 to 14/02/20	Double and Triple integral problem and application
5	5	17/02/20 to 21/02/20	Double and triple integral continue, Fourier series
6			1st Class Test

7	5	24/02/20 to 28/02/20	Fourier series continue and Half range sin,cosine series
8	5	02/03/20 to 06/03/20	Parsevals identity for Fourier series and Stereographic projection of complex number
9	5	09/03/20 to 13/03/20	Continuity and Differentiability of complex functions
10			
11	5	16/03/20 to 20/03/20	Analytic function ,Cauchy Riemann equation
12	5	23/03/20 to 27/03/20	Harmonic functions, Mapping of elementary functions
13	5	06/04/20 to 10/04/20	Mappings Rotation, Reflection, Magnification, Inversion,Conformal mapping
14	5	30/03/20 to 03/04/20	Mobius transformation,Fixed points
15	5	13/04/20 to 17/04/20	Cross section,Inverse points, Critical mappings
16			Final Sessional Test

RPS Degree College, Balana (Mahendergarh)

C :B.Sc(N.M.) 6th semester section D

Subject: Real and Complex Analysis

Name of the Faculty :Mr. Manjeet

Week	Lecture	Date	Topics
1	7	16/01/20 to 24/01/20	Basics of partial derivatives, Definition of Jcobians and Jcobians of functions with respect to two or more variables
2	5	27/01/20 to 31/01/20	problems of Jcobians
3	5	03/02/20 to 07/02/20	Beta and Gamma functions and related problem
4	5	10/02/20 to 14/02/20	Double and Triple integral problem and application
5	5	17/02/20 to 21/02/20	Double and triple integral continue, Fourier series
6			1st Class Test
7	5	24/02/20 to 28/02/20	Fourier series continue and Half range sin,cosine series
8	5	02/03/20 to 06/03/20	Parsevals identity for Fourier series and Stereographic projection of complex number
9	5	09/03/20 to 13/03/20	Continuity and Differentiability of complex functions
10			
11	5	16/03/20 to 20/03/20	Analytic function ,Cauchy Riemann equation
12	5	23/03/20 to 27/03/20	Harmonic functions, Mapping of elementary functions
13	5	06/04/20 to 10/04/20	Mappings Rotation, Reflection, Magnification, Inversion,Conformal mapping
14	5	30/03/20 to 03/04/20	Mobius transformation,Fixed points
15	5	13/04/20 to 17/04/20	Cross section,Inverse points, Critical mappings
16			Final Sessional Test