

KOM II mech - A 2015-16 LESSON PLAN

S.NO	Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks
1	7	22-12-15	Element (Unit, classification)	I	PPT	
2	7	24-12-15	Types of kinematic pairs	I	PPT	
3	7	29-12-15	Types of kinematic pairs and their DOF	I	PPT	
4	7	31-12-15	Types of constrained motion	I	PPT	
5	7	5-01-16	Introduction to Mechanisms and Machines	I	Black board	
6	7	7-01-16	Inversions of four bar mechanism	I	PPT	
8	1, 2	8-1-16	Inversions of slider-crank mechanism	I	PPT	
9	7	12-1-16	Inversions of double slider crank mechanism	I	PPT	
10	7	19-1-16	Problems of on DOF of mechanism	I	Black Board	
11	7	21-1-16	Introduction to Straightline Motion Mechanisms Exact and Approximate copies	II	Black Board	
13	1, 2	22-1-16	Peckellier mechanism, Hart mechanism	II	Black Board	
14	7	28-1-16	Scott Russel, Grasshopper	II	Black Board	
16	1, 2	29-1-16	Watt, Chebicheff Mechanism	II	Black Board	
← 25-01-2016 To I Mid Exam				28-01-2016		
17	7	02-2-16	Robert Mechanisms, Pantograph	II	Black Board	
18	7	4-2-16	Conditions for correct steering	II	Black Board	
20	1, 2	5-2-16	Davis and Ackerman's steering gear, velocity ratio	II	"	
21	7	9-2-16	Single and Double Hook's joint	II	PPT	
22	7	11-2-16	Universal coupling, Applications, Problems	II	Black Board	
24	1, 2	12-2-16	Kinematics: velocity and Acceleration, Motion of link	III	Black Board	

LESSON PLAN

S No	Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remark
25	7	16-2-16	Determination of velocity & Acceleration diagrams - Graphical method	III	Black Board	
26	7	18-2-16	Application of Relative velocity method for four bar chain	III	"	
28	1, 2	19-2-16	Analysis of Slider Crank chain for displacement, vel and Acceleration of slider	III	"	
29	8	23-2-16	Klein's Construction, Coriolis acceleration	III	"	
30	7	25-2-16	Determination of Coriolis component of acceleration	III	"	
32	1, 2	26-2-16	Instantaneous Centre of Rotation, Centroids & axes, Relative Motion b/w two bodies	III	"	
33	7	01-3-16	Three Centres in a line theorem	III	"	
34	7	3-3-16	Graphical determination of Instantaneous Centre, diagrams of simple mechanisms	III	"	
36	1, 2	4-3-16	Determination of angular velocity of points and links	III	"	
			03-03-2016 TO 05-03-2016 II Mid Examinations			
37	7	8-3-16	Definitions of Cam & followers, uses, Types of followers and cam	IV	PPT	
38	7	10-3-16	Types of follower motion: uniform velocity, uniform acceleration	IV	Black Board	
40	1, 2	11-3-16	Simple Harmonic Motion: Max vel & Max Acceleration during outward & Return stroke	IV	"	
41	7	15-3-16	Roller follower, Circular cam with straight flank and convex flank	IV	"	
42	7	17-3-16	Gears: Higher pairs, Friction wheels, Bevel gears, types	V	PPT	
44	1, 2	18-3-16	Law of Gearing, Condition for constant vel ratio	V	Black Board	
45	7	22-3-16	Forms of Teeth: Cycloidal and Involute profiles	V	PPT	
46	7	24-3-16	Sliding vel phenomenon of Interference, Methods of interference	V	PPT	
47	7	29-3-16	Condition for Minimum no of Teeth to avoid interference	V	Black Board	
48	7	31-3-16	Expression for Arc of Contact, path of Contact Introduction to helical, bevel and worm gearing	V	Black Board	

LESSON PLAN

S. NO	Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks
49	12	01-4-16	Gear Trains: Train value, Types	V	PPT	
50	7	7-4-16	Velocity Ratio, Simple, Reverted gear train, Epicyclic gear train	V	Blackboard	
51	7	12-4-16	Selection of Gearbox - Differential gear of an automobile	V	PPT	
		12-04-2016 TO 16-04-2016				
		<div style="display: flex; align-items: center;"> ← <div> <p>III Mid Examinations</p> </div> </div>				