

Lecture Plan-1

Faculty:- Semester:-V Class: - M.E Course Code:-ME -301-E

Subject: K.O.M Unit:-

S. No.	Topic :-Syllabus	Time Allotted:-
1.	Introduction Introduction about myself & students. D.C.E Teaching Methodology	05 Min.
2	Division of the Topic Syllabus dictated. Importance of this subject. Books referred.	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Marks distribution of each unit? Importance of this subject?	05 Min.

Assignment to be given:-Reference Readings:- THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi, S.S.Rattan & P.L. Ballaney

Lecture Plan-2

Faculty:-

Semester :-V

Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:-I

S. No.	Topic :-Mechanism & Machine.	Time Allotted:-
1.	Introduction Introduction about machine, structure. Concept of kinematics links, pairs, chains & mechanism	05 Min.
2	Division of the Topic Classification of all the above topics. Diagrams. Applications. Grasshof's criterion.	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Kinematics links? Pairs and chains? Mechanism? Machine?	05 Min.

Assignment to be given:-

Reference Readings:- THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi, S.S.Rattan & P.L. Ballaney

Doc. No.: DCE/0/15

Revision :00

Lecture Plan -3

Faculty:-

Semester :-V

Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:-I

S. No.	Topic :- Mechanism & Machine	Time Allotted:-
1.	Introduction A Brief Discussion about Types of constrained motion, Inversion of four bar chain mechanism	05 Min.
2	Division of the Topic Types of constrained motion, Inversion of four bar chain mechanism.	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Types of constrained motion? Inversion of four bar chain mechanism?	05 Min.

Assignment to be given:-

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi, S.S.Rattan & P.L. Ballaney.

Lecture Plan -4

Faculty:-

Semester :-V

Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:-I

S. No.	Topic :- Mechanism & Machine	Time Allotted:-
1.	Introduction A Brief Discussion about Inversion of single slider crank mechanism	05 Min.
2	Division of the Topic Inversion of single slider crank mechanism Pendulum pump, oscillating cylinder engine Rotary I. C. engine	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Inversion of single slider crank mechanism?	05 Min.

Assignment to be given:-

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney.

Lecture Plan -5

Faculty:-

Semester:-V

Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:-I

S. No.	Topic :- Mechanism & Machine	Time Allotted:-
1.	Introduction A Brief Discussion about Inversion of single slider crank mechanism	05 Min.
2	Division of the Topic Inversion of single slider crank mechanism Crank and slotted lever mechanism, Whitworth quick return mechanism	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Inversions of single slider crank mechanism? Crank and slotted lever mechanism? Whitworth quick return mechanism?	05 Min.

Assignment to be given:-

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi, S.S.Rattan & P.L. Ballaney.

Lecture Plan -6

Faculty:-

Semester :-V Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:-I

S. No.	Topic :- Mechanism & Machine	Time Allotted:-
1.	Introduction A Brief Discussion about Inversion of double slider crank mechanism	05 Min.
2	Division of the Topic Inversion of double slider crank mechanism Oldham couplings Elliptical trammel, Scotch yoke mechanism	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Inversions of double slider crank mechanism? Oldham couplings?	05 Min.

Assignment to be given:-

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney_

Lecture Plan -7

Faculty:-

Semester :-V

Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:-I

S. No.	Topic :- Mechanism & Machine	Time Allotted:-
1.	Introduction A Brief Discussion about Degree of Freedom .Kutzbach & Grubler's criterion	05 Min.
2	Division of the Topic Degree of Freedom , Kutzbach criterion, Grubler's criterion.	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Degree of Freedom? Kutzbach criterion? Grubler's criterion?	05 Min.

Assignment to be given:-

- 1) Degree of Freedom, Kutzbach criterion, Grubler's criterion.
- 2) Inversion of double slider crank mechanism?

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney,

Lecture Plan -8

Faculty:-

Semester :-V

Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:- I

S. No.	Topic :- Straight Line Mechanism	Time Allotted:-
1.	Introduction A Brief Discussion about Straight Line Mechanism Classification of Straight Line Mechanism Diagrams	05 Min.
2	Division of the Topic Working of Watt Mechanism Working of Hart Mechanism, Working of Grass Hooper Mechanism Working of Tchebicheff Mechanism,	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Explain the Working of Tchebicheff Mechanism?	05 Min.

Assignment to be given:-

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney,

Lecture Plan -9

Faculty:-

Semester :-V

Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:- I

S. No.	Topic :- Straight Line Mechanism	Time Allotted:-
1.	Introduction A Brief Discussion about Straight Line Mechanism Classification of Straight Line Mechanism Diagrams	05 Min.
2	Division of the Topic Working of Kempe's Mechanism Working of modified Grass Hooper Mechanism Working of Universal Drafting machine Working of Lazy Tongs Mechanism	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Explain the Working of Kempe's Mechanism ?	05 Min.

Assignment to be given:-

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney,

Lecture Plan -10

Faculty:-

Semester :-V

Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:- I

S. No.	Topic :- Straight Line Mechanism	Time Allotted:-
1.	Introduction A Brief Discussion about Straight Line Mechanism Concept of Pantograph Diagrams Concept of Steering Mechanism	05 Min.
2	Division of the Topic Working of Pantograph Application of Pantograph Working of Davi's & Ackermann Steering Mechanism	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Explain the Working of Pantograph? Explain the Working of Davi's & Ackermann Steering Mechanism?	05 Min.

Assignment to be given:- Working of Watt Mechanism
Working of Hart Mechanism,
Working of Grass Hooper Mechanism
Working of Tchebicheff Mechanism,

Reference Readings:- THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney,

Doc. No.: DCE/0/15
Revision :00

Lecture Plan -11

Faculty:-

Semester :-V

Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:-IV

S. No.	Topic :- G ears	Time Allotted:-
1.	Introduction A Brief discussion about gears.	05 Min.
2	Division of the Topic Introduction about gears, Classification, advantages & disadvantages, Applications.	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Introduction about gears? Classification, advantages & disadvantages? Applications?	05 Min.

Assignment to be given:-

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney.

Doc. No.: DCE/0/15
Revision :00

Lecture Plan -12

Faculty:-

Semester :-V

Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:-IV

S. No.	Topic :- G ears	Time Allotted:-
1.	Introduction A Brief Discussion about Gear Terminology. Diagram.	05 Min.
2	Division of the Topic Gear Terminology.	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Gear Terminology?	05 Min.

Assignment to be given:-

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney.

Doc. No.: DCE/0/15
Revision :00

Lecture Plan -13

Faculty:-

Semester :-V

Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:-IV

S. No.	Topic :- G ears	Time Allotted:-
1.	Introduction A Brief Discussion about Law of gearing.	05 Min.
2	Division of the Topic Law of gearing.	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Law of gearing?	05 Min.

Assignment to be given:-

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney.

Lecture Plan -14

Faculty:-

Semester :-V

Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:- IV

S. No.	Topic : G ears -	Time Allotted:-
1.	Introduction A Brief Discussion about length of Path of contact, Length of arc of contact, Contact ratio.	05 Min.
2	Division of the Topic Expression for length of Path of contact, Length of arc of contact, Contact ratio.	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Expression for length of Path of contact? Length of arc of contact? Contact ratio?	05 Min.

Assignment to be given:-

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney,

Lecture Plan -15

Faculty:-

Semester :-V

Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:- IV

S. No.	Topic :- G ears	Time Allotted:-
1.	Introduction A Brief Discussion about Formation of teeth profile.	05 Min.
2	Division of the Topic Formation of teeth profile. Cycloidal, Involute.	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Formation of teeth profile? Cycloidal? Involute?	05 Min.

Assignment to be given:-

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney.

Lecture Plan -16

Faculty:-

Semester :-V

Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:- IV

S. No.	Topic :- G ears	Time Allotted:-
1.	Introduction A Brief Discussion about Interference & under cutting	05 Min.
2	Division of the Topic Interference & under cutting, Expression for minimum number of teeth required for wheel to avoid interference. .	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Interference & under cutting? Expression for minimum number of teeth required for wheel to avoid interference?	05 Min.

Assignment to be given:-

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney.

Lecture Plan -17

Faculty:-

Semester :-V Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:- IV

S. No.	Topic :- G ears	Time Allotted:-
1.	Introduction A Brief Discussion about Interference & under cutting	05 Min.
2	Division of the Topic Expression for minimum number of teeth required for pinion to avoid interference. Expression for minimum number of teeth required for rack & pinion to avoid interference.	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Expression for minimum number of teeth required for pinion to avoid interference?	05 Min.

Assignment to be given:-

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney,

Lecture Plan -18

Faculty:-

Semester :-V

Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:- IV

S. No.	Topic : G ears -	Time Allotted:-
1.	Introduction A Brief Discussion about Interference & under cutting	05 Min.
2	Division of the Topic Expression for length of Path of contact, Length of arc of contact, Contact ratio to avoid interference.	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Expression for length of Path of contact? Length of arc of contact? Contact ratio to avoid interference?	05 Min.

Assignment to be given:-

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney.

Lecture Plan -19

Faculty:-

Semester :-V

Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:- IV

S. No.	Topic : G ears -	Time Allotted:-
1.	Introduction A Brief Discussion about Non standard gear teeth, Helical, Spiral bevel and Worm gears.	05 Min.
2	Division of the Topic Non standard gear teeth, Helical, Spiral bevel and Worm gears.	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Non standard gear teeth? Helical? Spiral bevel? Worm gears?	05 Min.

Assignment to be given:- 1) Expression for length of Path of contact, Length of arc of contact, Contact ratio to avoid interference. 2) Expression for minimum number of teeth required for pinion to avoid interference

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney.

Lecture Plan -20

Faculty:-

Semester :-V Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:-V

S. No.	Topic :-Gear Trains	Time Allotted:-
1.	Introduction A Brief Discussion about gear trains. Classification.	05 Min.
2	Division of the Topic Gear trains: Diagrams,	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Gear trains? Synthesis of simple Gear trains? Compound Gear trains? Reverted gear trains, Examples?	05 Min.

Assignment to be given:-

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney.

Lecture Plan -21

Faculty:-

Semester :-V Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:-V

S. No.	Topic :- Gear Trains	Time Allotted:-
1.	Introduction A Brief Discussion about Epicyclic gear trains	05 Min.
2	Division of the Topic Synthesis of simple, Compound, Reverted gear trains, Examples	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Analysis of epicyclic gear trains? Diagrams, and Applications?	05 Min.

Assignment to be given:- 1) Gear trains: Diagrams, Synthesis of simple, Compound, Reverted gear trains, Examples

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney.

Lecture Plan -22

Faculty:-

Semester :-V

Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:-V

S. No.	Topic :- Gear Trains	Time Allotted:-
1.	Introduction A Brief Discussion about Epicyclic gear trains	05 Min.
2	Division of the Topic Analysis of epicyclic gear trains: Diagrams, Applications.	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Analysis of epicyclic gear trains? Diagrams, and Applications?	05 Min.

Assignment to be given:- 1) Gear trains: Diagrams, Synthesis of simple, Compound, Reverted gear trains, Examples

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney.

Lecture Plan -23

Faculty:-

Semester :-V

Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:-II

S. No.	Topic :-Kinematics Analysis Of Plane Mechanism.	Time Allotted:-
1.	Introduction A Brief Discussion about I.C.R. of velocity	05 Min.
2	Division of the Topic I.C.R. of velocity: Diagrams Four bar mechanism, Single slider crank mechanism,	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer I.C.R. of velocity: Diagrams? Four bar mechanism? Single slider crank mechanism?	05 Min.

Assignment to be given:-

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney.

Lecture Plan -24

Faculty:-

Semester :-V

Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:-II

S. No.	Topic :- Kinematics Analysis Of Plane Mechanism.	Time Allotted:-
1.	Introduction A Brief Discussion about Graphical & analytical methods of velocity & acceleration analysis.	05 Min.
2	Division of the Topic Graphical & analytical methods of velocity & acceleration analysis of Four bar mechanism, Single slider crank mechanism,	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Graphical & analytical methods of velocity & acceleration analysis of Four bar mechanism and Single slider crank mechanism?	05 Min.

Assignment to be given:- 1) Graphical & analytical methods of velocity & acceleration analysis of Four bar mechanism and Single slider crank mechanism?

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney.

Lecture Plan -25

Faculty:-

Semester :-V Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:-II

S. No.	Topic :- Kinematics Analysis Of Plane Mechanism.	Time Allotted:-
1.	Introduction A Brief Discussion about Graphical & analytical methods of velocity & acceleration analysis.	05 Min.
2	Division of the Topic Graphical & analytical methods of velocity & acceleration analysis of Four bar mechanism, Single slider crank mechanism,	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Graphical & analytical methods of velocity & acceleration analysis of Four bar mechanism and Single slider crank mechanism?	05 Min.

Assignment to be given:- 1) Graphical & analytical methods of velocity & acceleration analysis of Four bar mechanism and Single slider crank mechanism?

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney.

Lecture Plan -26

Faculty:-

Semester :-V

Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:-VI

S. No.	Topic : Kinematics Synthesis of Mechanism.	Time Allotted:-
1.	Introduction A Brief Discussion about Kinematics synthesis of mechanism	05 Min.
2	Division of the Topic Kinematics synthesis of mechanism, Types, Function generation, Path generation, scale factor.	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Kinematics synthesis of mechanism? Types? Function generation? Path generation and scale factor?	05 Min.

Assignment to be given:-

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney,

Lecture Plan -27

Faculty:-

Semester :-V

Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:- VI

S. No.	Topic :- Kinematics Synthesis of Mechanism.	Time Allotted:-
1.	Introduction A Brief Discussion about Body guidance two & three position synthesis of four bar & slider crank mechanism.	05 Min.
2	Division of the Topic Body guidance two & three position synthesis of four bar & slider crank mechanism by Graphical & analytical methods.	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Body guidance two & three position synthesis of four bar & slider crank mechanism?	05 Min.

aney. Assignment to be given:-

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney.

Lecture Plan -28

Faculty:-

Semester :-V

Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:- VI

S. No.	Topic : Kinematics Synthesis of Mechanism.-	Time Allotted:-
1.	Introduction A Brief Discussion about Chebychev spacing of precession points	05 Min.
2	Division of the Topic To prove necessary equation of Chebychev spacing of precession points. .	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Chebychev spacing of precession points?	05 Min.

Assignment to be given:-

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney.

Lecture Plan -29

Faculty:-

Semester :-V

Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:- VI

S. No.	Topic :- Kinematics Synthesis of Mechanism.	Time Allotted:-
1.	Introduction A Brief Discussion about Freudenstein's equation.	05 Min.
2	Division of the Topic To prove necessary equation of Freudenstein's equation.	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Freudenstein's equation.	05 Min.

Assignment to be given:-

- 1) To prove necessary equation of Freudenstein's equation.
- 2) To prove necessary equation of Chebychev spacing of precession points.

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney.

Doc. No.: DCE/0/15
Revision :00

Lecture Plan -30

Faculty:-

Semester :-V

Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:-III

S. No.	Topic :-Cams	Time Allotted:-
1.	Introduction A Brief Discussion about Cam & follower.	05 Min.
2	Division of the Topic Cam & follower, Classification of cam & Follower, Disc cam nomenclature, Applications	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Cam & follower? Classification of cam & Follower? Disc cam nomenclature? Applications?	05 Min.

Assignment to be given:-

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney.

Lecture Plan -31

Faculty:-

Semester :-V Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:-III

S. No.	Topic :- Cams	Time Allotted:-
1.	Introduction A Brief Discussion about Cam & follower.	05 Min.
2	Division of the Topic How to draw cam profile for uniform velocity of follower motion. How to draw cam profile for S.H.M. case,	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer How to draw cam profile for uniform velocity of follower motion?	05 Min.

Assignment to be given:-

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney.

Lecture Plan -32

Faculty:-

Semester :-V Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:-III

S. No.	Topic :- Cams	Time Allotted:-
1.	Introduction A Brief Discussion about Cam & follower.	05 Min.
2	Division of the Topic Uniform acceleration & Retardation of follower motion	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer How to draw cam profile for S.H.M. case? Uniform acceleration & Retardation of follower motion?	05 Min.

Assignment to be given:-

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney,

Lecture Plan -33

Faculty:-

Semester :-V Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:-III

S. No.	Topic :- Cams	Time Allotted:-
1.	Introduction A Brief Discussion about Cam & follower.	05 Min.
2	Division of the Topic How to draw cam profile for tangent & circular arc cams.	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer How to draw cam profile for tangent & circular arc cams?	05 Min.

Assignment to be given:- How to draw cam profile for S.H.M. case, Uniform acceleration & Retardation of follower motion.

Reference Readings:- THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney.

Lecture Plan -34

Faculty:-

Semester :-V Class:- M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit:-VII

S. No.	Topic :-Kinematics of Spatial Mechanism.	Time Allotted:-
1.	Introduction A Brief Discussion about Kinematics of spatial mechanism.	05 Min.
2	Division of the Topic Kinematics of spatial mechanism, Link coordinate system, Homogeneous transformation matrix.	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer Kinematics of spatial mechanism? Link coordinate system? Homogeneous transformation matrix?	05 Min.

Assignment to be given:- Kinematics of spatial mechanism, Link coordinate system, Homogeneous transformation matrix

Reference Readings:- THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney.

Lecture Plan -35

Faculty:-

Semester:-V

Class: - M.E

Course Code:-ME -301-E

Subject: K.O.M

Unit: - VII

S. No.	Topic :- Kinematics of Spatial Mechanism.	Time Allotted:-
1.	Introduction A Brief Discussion about Loop Closure equation, Diagrams.	05 Min.
2	Division of the Topic To prove necessary equation of Loop Closure equation.	35 Min.
3.	Conclusion Above topic to be discussed.	05 Min.
4	Question / Answer To prove necessary equation of Loop Closure equation?	05 Min.

Assignment to be given:-

Reference Readings:-

THEORY OF MACHINE & MECHANISM BY
R.S.Khurmi , S.S.Rattan & P.L. Ballaney.