



PAGE 1

PAVIATH INTEGRATED SOLUTION

POLYTECH

MECHANICAL

THEORY OF MACHINES & MECHANISMS

Paviath ONLINE

◆ MECHANICAL ENGINEERING GROUP ◆ FOURTH SEMESTER ◆ POLYTECHNIC CODE ME/PT/PG/AE/MH

### COURSE AIM

- ◆ UNDERSTANDING THE CONCEPT OF MACHINES
- ◆ MECHANISMS AND THEIR ELEMENTS
- ◆ STUDYING KINEMATICS ASPECTS OF VARIOUS LINKS IN MECHANISMS
- ◆ FOUNDATION FOR KINEMATICS SYNTHESIS, ANALYSIS
- ◆ DESIGN OF MECHANISMS

### COURSE OBJECTIVE

- ◆ KNOWING DIFFERENT MACHINE ELEMENTS AND MECHANISMS
- ◆ UNDERSTANDING KINEMATICS & DYNAMICS OF DIFFERENT MACHINES & MECHANISMS
- ◆ SELECTING SUITABLE DRIVES & MECHANISMS FOR A PARTICULAR APPLICATION
- ◆ APPRECIATING CONCEPT OF BALANCING AND VIBRATION
- ◆ DEVELOPING ABILITY TO COME UP WITH INNOVATIVE IDEAS

### COURSE CONTENTS

- ◆ FUNDAMENTALS & TYPES OF MECHANISMS
- ◆ VELOCITY & ACCELERATION IN MECHANISM
- ◆ CAMS AND FOLLOWERS
- ◆ POWER TRANSMISSION
- ◆ FLYWHEEL AND GOVERNORS
- ◆ BRAKES, DYNAMOMETERS, CLUTCHES & BEARINGS
- ◆ BALANCING & VIBRATIONS

### REFERENCE BOOKS

- ◆ KHURMI GUPTA THEORY OF MACHINES
- ◆ S.S.RATTAN THEORY OF MACHINE
- ◆ P.L.BALLANEY THEORY OF MACHINES
- ◆ TIMOSHENKO THEORY OF MACHINES
- ◆ JAGDISH LAL THEORY OF MACHINES
- ◆ GHOSH - MALLIK THEORY OF MACHINES
- ◆ BEVEN T. THEORY OF MACHINES
- ◆ J.E.SHIGLEY THEORY OF MACHINES MC GRAW HILL

### SAM (SYNTHESIS ANALYSIS MECHANISM)

- ◆ GENERAL ◆ DESIGN WIZARDS ◆ MODELLING
- ◆ INPUT MOTION ◆ CAD INTERFACE
- ◆ ANALYSIS ◆ RESULTS
- SALTIRE SOFTWARE
- ◆ MATHS ILLUSTRATIONS
- ◆ GEOMETRY EXPRESSIONS
- ◆ MECHANICAL EXPRESSIONS
- ◆ ANALYTIS CAM

### APM WINMACHINE

APM CAM/APM PLAIN/APM SCREW/APM STRUCTURE3D/APM DYNAMICS/APM BEAM/APM GRAPH/APM STUDIO  
APM DRIVE/APM TRANS/APM SHAFT/APM BEAR/APM JOINT/APM SPRING/APM BASE/APM MECHANICAL DATA/APM MATERIAL DATA/APM SECTION DATA/APM CONSTRUCTION DATA/APM BOOK



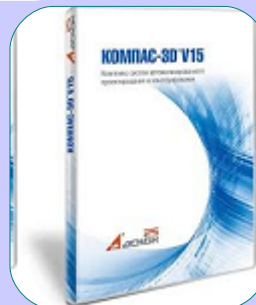
APM WINMACHINE



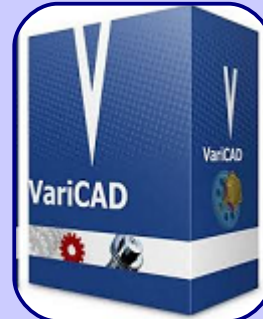
SALTIRE SOFTWARE



ARTAS SAM



KOMPAS 3D



VARICAD

DESCRIPTION	ONLINE	TRAINING CENTRE	WEBINAR	REMARKS
THEORY OF MACHINES & MECHANISMS	REGISTRATION	DOCUMENTS	COUNSELLING	OWN LAPTOP
ONLINE	2/UNIT TRAINING	4/UNIT ASSIGNMENT	2/UNIT ASSIGNED	SCHEDULE
PRESENTATION	WEBINAR	NETWORK	PRESENTATION	2/UNIT ASSIGNED
PERIOD	2 HRS/1/UNIT IN SEQUENCE	NETWORKING/HRS*	PRESENTATION	* BROWSING FEE
PRICE (SEMESTER)	BY MAIL	* BROWSING FEE	NO COST	CERTIFICATE

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