

**DEMAND****PAVIATH INTEGRATED SOLUTION****CIVIL ENGG****CIVIL POLY****COMPUTER APPLICATION IN CIVIL ENGINEERING PRACTICE****Paviath ONLINE****◆ CIVIL POLY ◆ III YEAR VI SEM ◆ CODE CEM65****OBJECTIVES:**

- ALL THE EXPERIMENTS GIVEN IN THE LIST OF EXPERIMENTS SHOULD BE COMPLETED AND GIVEN FOR THE END SEMESTER PRACTICAL EXAMINATION.
- IN ORDER TO DEVELOP BEST SKILLS IN HANDLING INSTRUMENTS/EQUIPMENT AND TAKING READING IN THE PRACTICAL CLASSES, EVERY TWO STUDENTS SHOULD BE PROVIDED WITH SEPARATE EXPERIMENTAL SETUP FOR DOING EXPERIMENTS IN THE LABORATORY.
- THE EXTERNAL EXAMINERS ARE REQUESTED TO ENSURE THAT A SINGLE EXPERIMENTAL QUESTION SHOULD NOT BE GIVEN TO MORE THAN FOUR STUDENTS WHILE ADMITTING A BATCH OF 30 STUDENTS DURING BOARD EXAMINATIONS.

PART-A

- I.ELECTRONIC SPREAD SHEET USING SOFTWARE
SOLVING PROBLEMS INVOLVING ESTIMATION, ANALYSIS AND DESIGN USING ANY ONE OF THE AVAILABLE PACKAGES MENTIONED BELOW OR ANY OTHER SUITABLE PACKAGES FOR THE FOLLOWING EXERCISES
1.PREPARE THE ESTIMATE SHEET WITH GIVEN DATA (PROVIDE ALL THE MEASUREMENT DETAILS) AND CALCULATE THE QUANTITY USING FORMULA BAR.
2.PREPARE THE ABSTRACT SHEET FOR THE GIVEN DATA AND CALCULATE AMOUNT AND TOTAL AMOUNT USING FORMULA BAR (USE SEPARATE COLUMN FOR RATES AND UNITS)
3.DESIGN AND ANALYSIS PROBLEMS
1) CALCULATE AREA AND ELONGATION USING FORMULA BAR
1) CALCULATE EFFECTIVE DEPTH 'D' AND AREA OF STEEL 'AST' USING FORMULA BAR.
4.FOR GIVEN DIMENSION OF MASONRY/R.C.C DAM IE. TOP WIDTH, BOTTOM WIDTH, HEIGHT OF DAM, HEIGHT OF WATER, SPECIFIC WEIGHT OF MASONRY/R.C.C. SP. WT OF WATER ETC, FIND THE BASE PRESSURE AND CHECK THE STABILITY OF THE DAM.
5.FINDING CENTRE OF GRAVITY: IZ AND IYY OF I AND I SECTIONS.

PART B

- II RCC DETAILING USING SOFTWARE
GENERATION OF DETAILED DRAWINGS FOR GIVEN SPECIFICATION AND PREPARATION OF BAR BENDING SCHEDULE USING ONE OF THE PACKAGES MENTIONED BELOW OR ANY OTHER SUITABLE PACKAGES FOR THE FOLLOWING EXERCISES.
CROSS SECTION AND LONGITUDINAL SECTION OF:
1. CONTINUOUS ONE WAY SIMPLY SUPPORTED SLAB
2. SIMPLY SUPPORTED TWO-WAY SLAB
3. RESTRAINED TWO-WAY SLAB
4. SINGLY REINFORCED RECTANGULAR BEAM
5. DOUBLY REINFORCED CONTINUOUS RECTANGULAR BEAM WITH TWO EQUAL SPAN
6. DOG-LEGGED STAIRCASE
7. R.C.C COLUMN WITH SQUARE ISOLATED FOOTING

III RCC STRUCTURES-ANALYSIS USING SOFTWARE

- 1.CARRY OUT THE ANALYSIS AND DESIGN OF RCC STRUCTURES USING ANY ONE OF THE AVAILABLE PACKAGES MENTIONED BELOW OR ANY OTHER SUITABLE PACKAGES.

IV CONSTRUCTION PROJECT

- MANAGEMENT USING SOFTWARE
1.DEVELOP THE CPM/PERT NETWORK FOR THE PROPOSED SIMPLE BUILDING PROJECT USING ANY ONE OF THE AVAILABLE PACKAGES MENTIONED BELOW OR ANY OTHER SUITABLE PACKAGES.

COMPUTERS PLAY A VERY VITAL ROLE IN PRESENT DAY LIFE, MORE SO, IN ALL THE PROFESSIONAL LIFE OF ENGINEERING. IN ORDER TO ENABLE THE STUDENTS USE THE COMPUTERS EFFECTIVELY IN PROBLEM SOLVING, THIS COURSE OFFERS VARIOUS ENGINEERING APPLICATIONS OF COMPUTERS IN CIVIL ENGINEERING

**APM Civil Engineering****STC APM**

SYLLABUS COACHING
TRAINING - 2/UNIT TRAINING
SELF - 4/UNIT ASSIGNMENT
PRESENTATION - 2/UNIT
SHOWTIME - 2/UNIT

MATHS ILLUSTRATION - GEOMETRY EXPRESSIONS**ASCON RENG**

SYLLABUS PERIOD
TRAINING - 2/2 HRS/UNIT
REMOTE - 2/2 HRS/UNIT
DURATION - SEMESTER
ONLINE/REMOTE ACCESS

MECHANICAL EXPRESSIONS - ANALYTIX CAMS**ARCADIA BIM**

FEATURES
TRAINING BY IND. PROFESSIONAL
INDUSTRY APPLICATION
TRAINER OPPORTUNITY
CERTIFICATION