ID.No./Seat No. 10EL131

MEHRAN UNIVERSITY OF ENGINEERING AND TECHNOLOGY,
JAMSHORO.

FIRST TERM SECOND YEAR (3RD TERM) B.E.(ELECTRICAL)
REGULAR EXAMINATION 2011 OF 10-BATCH.

COMPUTER AIDED DRAWING

Dated: 10-05-2011. Time Allowed: 03 Hours. Max.Marks-80.

NOTE. ATTEMPT ANY **FIVE** QUESTIONS.
ASSUME DATA YOURSELF WHERE EVER NECESSARY.

Q.No.			Marks
01	(a)	State the possible quadrants in which the following points are situated. i. A point W; its front view is on the xy and its top view is 10 mm below the xy. ii. A point X; its top view is 40 mm above the xy and its front view is 30 mm below the top view. iii. A point Y; its front view is 40 mm below the xy and its top view is 10 mm above the xy. iv. A point Z; its top view is 20 mm below the xy and its front view is 40 mm above the top view.	(04)
	(b)	Draw the projections of a 80 mm long line in the following position? i. Parallel to both reference planes, 10 mm below H.P & 20 mm in front of V.P. ii. Perpendicular to & lies in V.P and 10 mm below the H.P. iii. Inclined at 60° & 10 mm behind V.P and is placed in the H.P.	(12)
02	(a)	What are the different position of a straight line described with respect to the two reference planes.	(06)
	(b)	Two pegs fixed on a wall are 450 centimeters apart. The distance between the pegs measured parallel to the floor is 360 centimeters. If one peg is 150 centimeters above the floor, find the height of the second peg in meters and the inclination of the line joining the two pegs, with the floor.	(10)
03	(a)	What is the difference between first angle projection method and third angle projection method?	(06)
	(b)	An object O is placed 1.2 m above the ground and is placed in the centre of a room 6m x 4.2 m x 3.6 m high. Determine graphically its distance from one of the roof corner.	(10)
04	(a)	A line AB, 75 mm long, is inclined at 45 degrees to the HP and 30 degrees to the VP. Its end A is in the HP and 20 mm in front of VP. Draw its projections and show its traces.	(08)
	(b)	A line PQ 100 mm long is inclined at 30 degrees to the HP and at 45 degrees to the VP. Its mid point is in the VP and 20 mm above the HP. Draw its projections, if its end P is in the third quadrant and Q in the first quadrant.	(08)

Cont'd on P/-2....

05 (a) Explain the term Traces & its types with sketches? (06)

(b) A square ABCD of 50 mm side has its corner A in the HP. Its diagonal AC inclined at 30 degrees to the HP and the diagonal BD inclined at 45 degrees to the VP and parallel to the HP. Draw its projections when a circle of 40 mm diameter is inscribed at the centre of the square ABCD. (10)

06 (a) Draw any two Rivet heads assuming diameter as 2.5 cm. (08)

i. Rounded Countersunk Head Rivet
ii. Snap Head Rivet
iii. Pan Head Rivet

(b) Draw any two Threads assuming pitch as 4 cm. (08)

i. British Association Thread
ii. Square Thread
iii. Whit worth Thread

07. Draw the two views of a single riveted butt joint with two cover plates with the following data (16)

d = 15 mm
t = 15 mm
t_1 = 10 mm
p = 3d

08 (a) Define the importance of implementing a CAD system with perspective of various engineering fields. Enlist the primary steps which are to be performed before starting the first drawing? (10)

(b) Discuss the different drawing aids of AutoCAD software with suitable sketches. (06)

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