



AJEENKYA

D Y PATIL UNIVERSITY

Summer Term Examinations (June/July 2019)

School: School of Engineering

Program: B Tech (MACT/DS/CTIS)

Course: Computer Aided Engineering Graphics

Course Code: ENG106

Semester: Summer

Max Marks: 40

Duration (mins): 120 mins

Instructions:

- (1) Attempt A or B from question no 1,2,3 & 4
- (2) Figures to the right indicate full marks.
- (3) Use of non-programmable pocket size scientific calculator is Permitted.
- (4) Neat diagram must be drawn wherever necessary.
- (5) Assume suitable data, if necessary.

- Q1) A) A line AB, 75 mm long is inclined at an angle of 35° to the HP and 55° to the VP. Its end point 'A' is on the HP and 15 mm in front of the VP. Draw the projections of the line AB assuming it to be in the first quadrant. [9]

OR

B) A line AB has its end point A 10mm in front of VP. The length of line in elevation is 65mm and it is inclined to XY line at 40° . Line makes an angle of 30° to the HP. The midpoint of the line AB is 45mm above the HP. Draw the projections of line AB [9]

- Q2) A) A pentagonal plane ABCDE of side 40 mm is kept on its side AB in such a way that its surface makes an angle of 40° with HP. Draw the projections of the pentagonal plane ABCDE when side AB which is in the HP is inclined at 40° with VP with its end A 20 mm in front of VP. [9]

OR

B) A regular hexagonal plane of 30mm side has one of its corners on the H.P. The surface of the plane is inclined at 30° to H.P. Draw the projection of the plane when diagonal passing through the resting corner on H.P. makes an angle of 45° to the V.P. [9]

- Q3) A) A square pyramid side of base 40mm and axis length 60mm is kept on the H.P. on one of its base edges in such a way that its axis makes an angle of 30° with the H.P. and 45° with the V.P. Draw the projections of the pyramid keeping base of the pyramid towards the observer. [12]

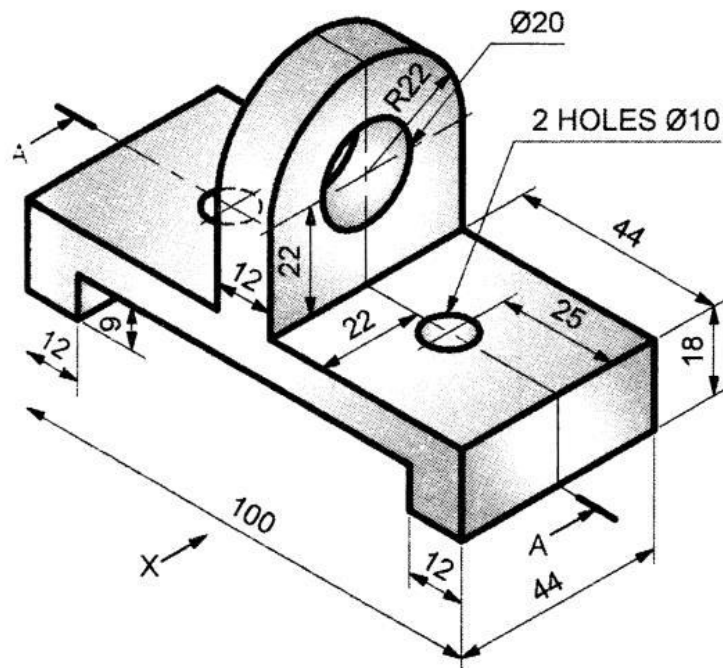
OR

B) A triangular pyramid, base side of 50 mm and axis height 75 mm, is resting in H.P. on one of its base side. Then, it is inclined to H.P in such a way that the base surface is inclined at an angle of 50° with H.P. Draw the projections of the solid, if the resting side is inclined at an angle of 45° with V.P. [12]

Q4) A) Fig. shows the pictorial view of an object. Using first angle method of projections draw:

- i) Elevation in the direction of arrow 'X'
- ii) Plan
- iii) End view from left hand side
- iv) Give all dimensions

[10]



OR

B) Fig. shows the pictorial view of an object. Using first angle method of projections draw:

- i) Elevation in the direction of arrow 'X'
- ii) Plan
- iii) End view from left hand side
- iv) Give all dimensions

[10]

