

DEPARTMENT OF MECHANICAL ENGINEERING
UNIVERSITY INSTITUTE OF ENGINEERING AND TECHNOLOGY, CSJM UNIVERSITY, KANPUR

Engineering Drawing (TCA-S101)

Semester: 2022-23 (Odd Semester)

Year: 1st Year (2K22)

End Semester Examination

Time: 3 h

Maximum marks: 50

All questions are compulsory

Section B

20 marks (5 questions of 4 marks each)

1. A line AB, 50 mm long, is inclined at 45° to the H.P. and 30° to the V.P. Its end B is in the V.P. and 20 mm above H.P. Draw its projections.
2. A line AB, 50 mm long, has its end A in both the H.P. and the V.P. It is inclined at 60° to the H.P. and at 30° to the V.P. Draw its projections.
3. A line PQ 100 mm long, is inclined at 60° to the H.P. and at 30° to the V.P. Its mid point is in the V.P. and 20 mm above the H.P. Draw its projections.
4. Draw isometric view of cube of side 25 mm.
5. Draw isometric view of cylinder of radius 2.5 cm and height 7 cm.

Section C

20 marks (2 questions of 10 marks each.)

1. A line AB, 90 mm long, is inclined at 60° to the H.P. Its end A is 10 mm above the H.P. and 20 mm in front of the V.P. Its front view measures 65 mm. Draw the top view of AB and determine its inclination with the V.P.
2. The front view of straight line AB is 60 mm long and is inclined at 60° to the reference line xy. The end point A is 15 mm above H.P. and 20 mm in front of V.P. Draw the projections of a line AB if it is inclined at 45° to the V.P. and is situated in the first quadrant. Determine its true length, and inclination with the H.P.

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Semester: 2022-23 (Odd Semester)

Year: 1st Year (2K22)

Mid Semester Examination (1)

Time: 1.5 h

Maximum marks: 30

All questions are compulsory

Section B

9 marks (3 questions of 3 marks each)

1. A line AB, 75 mm long, is inclined at 45° to the H.P. and 30° to the V.P. Its end B is in the H.P. and 40 mm in front of the V.P. Draw its projections.
2. A line AB, 65 mm long, has its end A 20 mm above the H.P. and 25 mm in front of the V.P. The end B is 40 mm above the H.P. and 65 mm in front of the V.P. Draw the projections of AB and show its inclinations with the H.P. and the V.P. $\rightarrow 23^\circ, 32^\circ, 39^\circ$
3. A line AB, 90 mm long is inclined at 45° to the H.P. and its top view makes an angle of 60° with the V.P. The end A is in the H.P. and 12 mm in front of the V.P. Draw its front view and find its true inclination with the V.P. $\rightarrow 78^\circ$

Section C

12 marks (2 questions of 6 marks each,)

1. The top view of line AB measures 60 mm and inclined to reference line at 60° . The end point A is 15 mm above the H.P. and 30 mm in front of the V.P. Draw the projections of the line when it is inclined at 45° to the H.P. and is situated in the first quadrant. Find true length and inclination of the line with the V.P.
2. The top view of a 75 mm long line CD measures 50 mm, C is 50 mm in front of the V.P. and 15 mm below the H.P. ~~The distance between the end projectors is 75 mm.~~ \rightarrow F.V.L \rightarrow 50 mm Draw the projections of AB and determine its true length and inclinations with the two planes.

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Engineering Drawing (TCA-S101)

Semester: 2022-23 (Odd Semester)

Year: 1st Year (2K22)

Mid Semester Examination (II)

Time: 1.5 h

Maximum marks: 30

All questions are compulsory

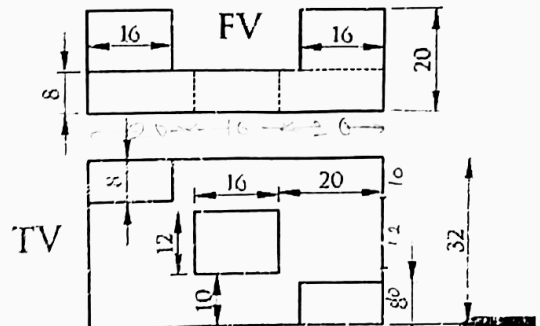
Section-B

1. Draw isometric view of cube of side 5 cm
2. Draw isometric view of cylinder of radius 2.5 cm and height 7.5 cm.
3. Draw isometric view of square of side 5 cm.



Section- C

1. Draw isometric view of given orthographic projection.



2. Draw the projection of a square of side 5 cm is parallel to HP and one edge inclined to VP at an angle 30 deg.