NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR
B.Tech. EXAMINATIONS, February 2022

Department: Mechanical Engineering
Semester: I (ODD)
Subject Code: ME-101
Subject Name: Engineering Graphics

Exam.: Minor Examination
Time: 1.5 hours (02:30 PM - 04:00 PM)
Maximum: 20 marks

Answer ALL questions

Q1 What is the Trace? What do you mean by H.T and V.T of a Line and a Plane? Explain with a suitable example. [3]

Q2 In Engineering Drawing, shows the graphical representation with suitable diagrams of the following lines: a) Hidden line, b) Leader line, c) Centre line, and d) Hatching Line [3]

Q3 A line AB, 70mm long, has its end A 15mm above HP and 20mm in front of VP. It is inclined at 30° to HP and 45°to VP. Draw its projections and mark its traces [7]

Q4 A square pyramid of base 40mm and axis 70mm has one of the triangular faces on VP. Draw the projections when front view of the axis is inclined at 30° to HP keeping the apex nearer to the observer. [7]

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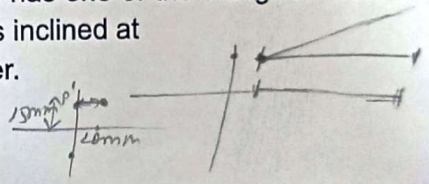


National Institute of Technology Hamirpur
Department of Mechanical Engineering
End Sem. Examination (February 2023)

Date: February 13, 2023

Time: 3 hours
Max. Marks: 20

B. Tech. 1st Semester
ME-101 Engineering Graphics

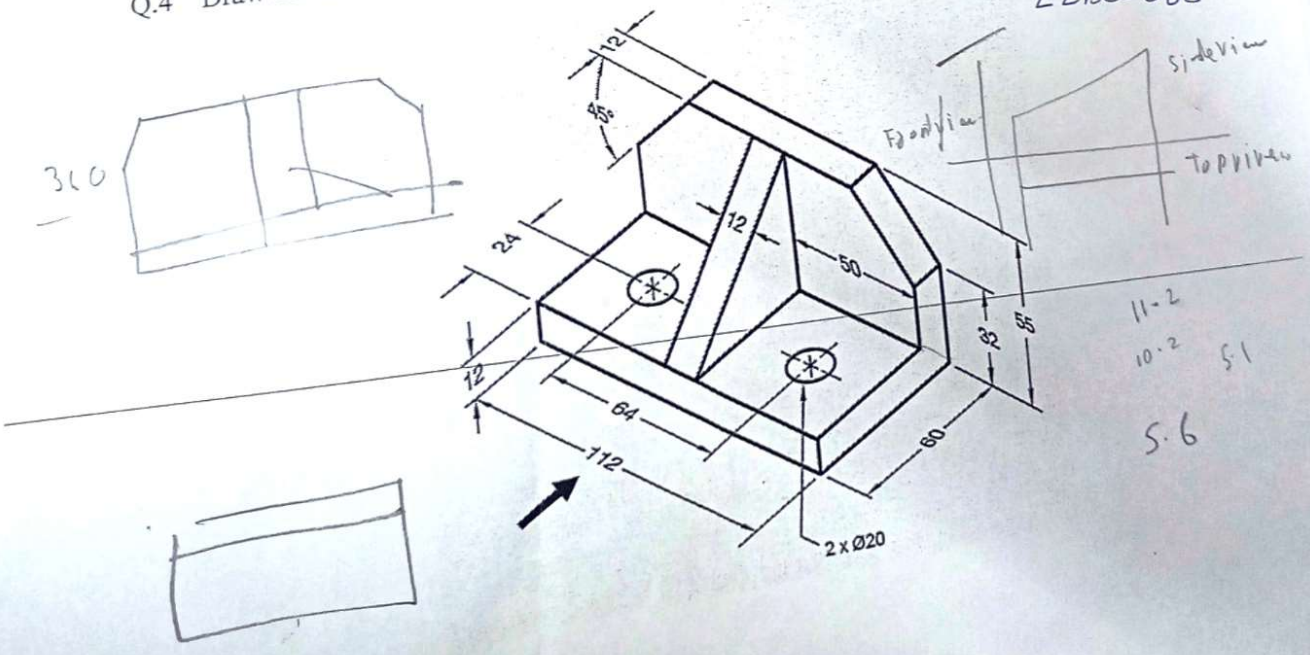
Note: For the sole purpose of examination, the margin and title block are not required. Write your Roll No. on the right top corner of your drawing sheets only using a ballpoint pen. Don't remove the construction line you used to draw the main objects.

Q.1 A cylinder of 40 mm diameter, 60 mm height and having its axis vertical, is cut by a section plane, perpendicular to the V.P., inclined at 45° to the H.P. and intersecting the axis 32 mm above the base. Draw its front view, sectional top view, and sectional side view. **[5]**

Q.2 Draw the projections of a regular hexagon of 25 mm side, having one of its sides in the H.P. and inclined at 60° to the V.P. and its surface making an angle of 45° with the H.P. **[5]**

Q.3 Line AB has its ends A 10 mm from VP and 20 mm from HP. Point B is 55 mm from VP and 50 mm from HP. Distance between end projectors is 50 mm. Draw the front view, top view and left side view of the line assuming the line to be in first quadrant. **[5]**

Q.4 Draw the orthographic view's front view, top view and side view of the following object. **[5]**



* All dimensions in mm