| Reg.No.: | | | | | | | | |
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VIVEKANANDHA COLLEGE OF ENGINEERING FOR WOMEN
[AUTONOMOUS INSTITUTION AFFILIATED TO ANNA UNIVERSITY, CHENNAI]
Elayampalayam – 637 205, Tiruchengode, Namakkal Dt., Tamil Nadu.

**Question Paper Code: 1002**

B.E. / B.Tech. DEGREE SUPPLEMENTARY EXAMINATIONS – FEB. / MAR. 2020

First Semester

Computer Science and Engineering

U19GE101 – ENGINEERING GRAPHICS

(Common to Electrical and Electronics Engineering, Electronics and Communication Engineering, Information Technology & Biotechnology)

(Regulation 2019)

Time: Three hours | Maximum: 100 marks

Answer ALL questions

(5 x 20 = 100 marks)

1. a) A line measuring 75 mm long has one of its ends 50 mm in front of VP and 15 mm above HP. The top view of the line is 50 mm long. The other end is 15 mm in front of VP and is above HP. Draw its projections and finds its true inclinations.

(OR)

b) A circular lamina of diameter 70 mm has the end A of the diameter AB on HP and the end B on VP. Draw its projections when its surface is inclined at 50° to HP and 40° to VP.

2. a) A hexagonal pyramid of side 25 mm, axis 75 mm long lies with one of its triangular faces on the HP and its axis is parallel to the VP. Draw its projections.

(OR)

b) Draw the projections of a cube of 35 mm side resting on one of its edges on the HP with a solid diagonal perpendicular to the VP.

3. a) A square pyramid of base 30 mm and axis 60 mm long is standing on the HP with its base edges equally inclined to VP. It is cut by a section plane perpendicular to the VP and inclined at 30° to the HP, bisecting the axis. Draw the sectional top view and the true shape of the section.

(OR)

b) A pentagonal pyramid of base side 25 mm and altitude 50 mm rests on its base on the HP with one of the base edges perpendicular to the VP. It is cut by a plane inclined at 45° to the base. The cutting plane meets the axis at 20 mm above the base. Draw the front view, sectional top view and the true shape of the section.

4. a) A square pyramid of base side 30 mm and height 50 mm rests on its base on the HP, with a base edge parallel to VP. It is cut by a plane perpendicular to VP, 50° to HP meeting the axis 30 mm above HP. Draw the development of the lateral surfaces.

(OR)

b) A hexagonal prism edge of base 20 mm and axis 50 mm long rests with its base on HP such that one of its rectangular faces is parallel to VP. It is cut by a plane perpendicular to VP, inclined at 45° to HP and passing through the right corner of the top face of the prism. Draw the development of the lateral surfaces of the truncated prism.

5. a) Draw the orthographic views from the given pictorial view shown in Figure 1.

(OR)

b) Draw the isometric view from the given detailed views shown in Figure 2.

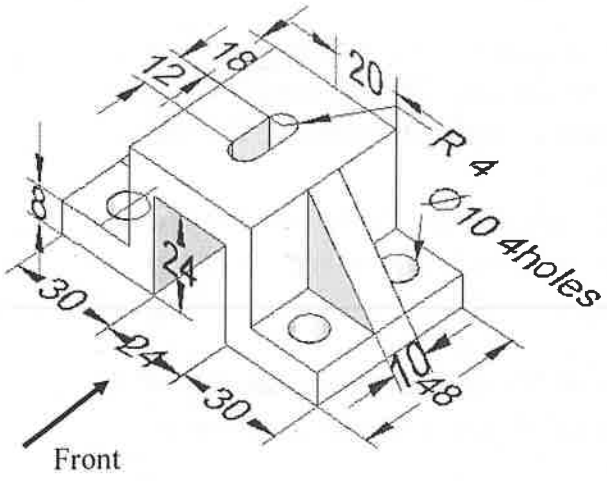


Figure 1

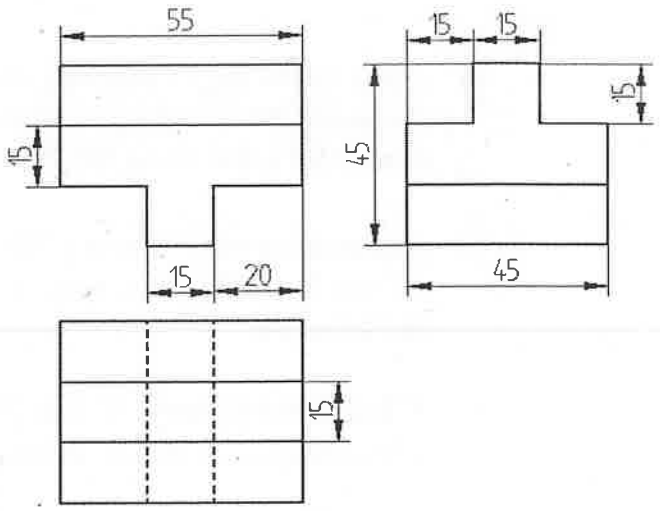


Figure 2

| Reg.No.: | | | | | | | | |
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VIVEKANANDHA COLLEGE OF ENGINEERING FOR WOMEN
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Elayampalayam – 637 205, Tiruchengode, Namakkal Dt., Tamil Nadu.

**Question Paper Code: 1001**

B.E. / B.Tech. DEGREE SUPPLEMENTARY EXAMINATIONS – FEB. / MAR. 2020
First Semester
Computer Science and Engineering
U15GE101 – ENGINEERING GRAPHICS
(Common to Electrical and Electronics Engineering, Electronics and Communication Engineering, Information Technology & Biotechnology)
(Regulation 2015)

Time: Three hours Maximum: 100 marks

Answer ALL questions.

(5 x 20 = 100 marks)

1. a) A line PQ 60 mm long has its end P 20 mm above the HP and 25 mm in front of VP. The end Q is 50 mm above the HP and 50 mm in front of VP. Draw its projections and find its inclinations with VP and HP.

(OR)

b) A square lamina ABCD of 60 mm side rests with one of its edges on HP. The lamina is inclined at an angle 45° to the HP and one of its edges inclined at an angle 30° to VP. Draw the projections of lamina.

2. a) A hexagonal prism of side of base 25 mm and axis 60 mm rests on a corner of its base in HP with the axis of the prism inclined at 40° to HP and parallel to VP. Draw its projections.

(OR)

b) Draw the projections of a cube of 35 mm side resting on one of its edges on the HP with a solid diagonal perpendicular to the VP.

3. a) A square pyramid of base 30 mm and axis 60 mm long is standing on the HP with its base edge equally inclined to VP. It is cut by a section plane perpendicular to the VP and inclined at 30° to the HP, bisecting the axis. Draw the sectional top view and true shape of the section.

(OR)

b) A pentagonal pyramid of base side 25 mm and altitude 50 mm rests on its base on the HP with one of the base edges perpendicular to the VP. It is cut by a plane inclined at 45° to the base. The cutting plane meets the axis at 20 mm above the base. Draw the front view, sectional top view and true shape of the section.

4. a) A square pyramid of base side 30 mm and height 50 mm rests on its base on the HP, with a base edge parallel to VP. It is cut by a plane perpendicular to VP, 50° to HP meeting the axis 30 mm above HP. Draw the development of the lateral surfaces.

(OR)

b) A hexagonal prism edge of base 20 mm and axis 50 mm long rests with its base on HP such that one of its rectangular faces is parallel to VP. It is cut by a plane perpendicular to VP, inclined at 45° to HP and passing through the right corner of the top face of the prism. Draw the development of the lateral surfaces of the truncated prism.

5. a) Draw the orthographic views from the given pictorial view shown in Figure 1.

(OR)

b) Draw the Isometric view from the given detailed views shown in Figure 2.

Figure 1

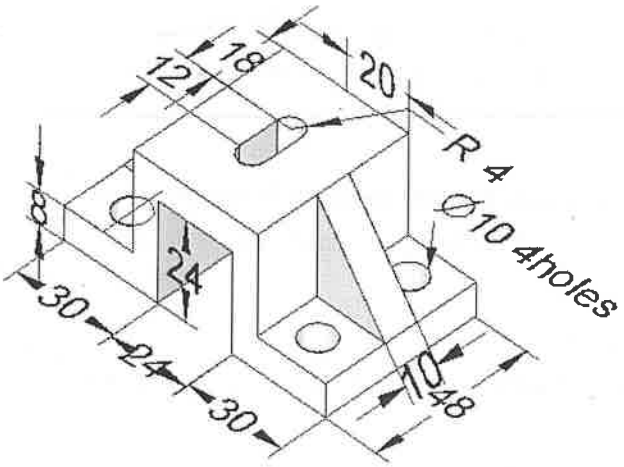


Figure 2

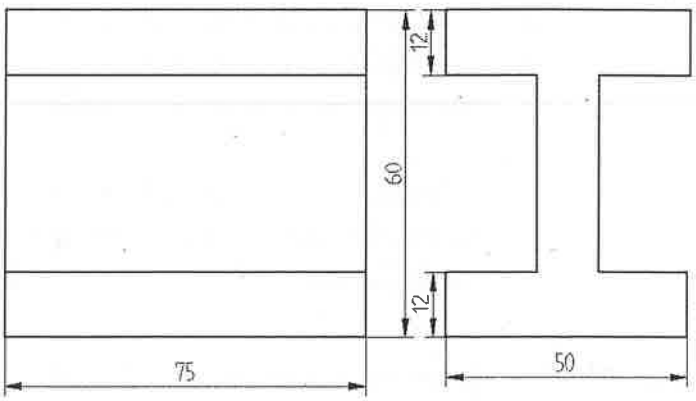


FIG 2