

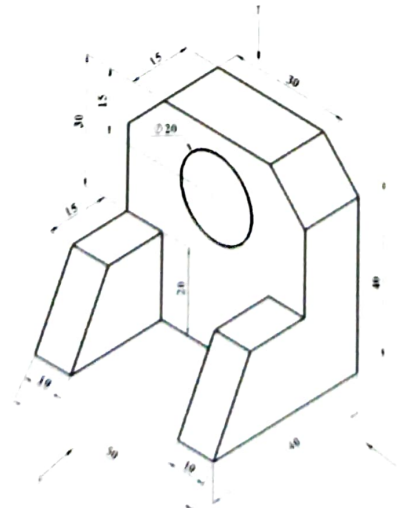
RV COLLEGE OF ENGINEERING®
 (AUTONOMOUS INSTITUTE AFFILIATED TO VTU, BELAGAVI)
I Semester B.E. Degree Examination, April/May 2023
COMPUTER AIDED ENGINEERING GRAPHICS –
22MECD13/23
(COMMON TO ALL BRANCHES)

Time: 03 Hours

Maximum Marks: 50

Instructions to candidates:

1. Answer **ANY TWO** questions from **Part A-Manual drawing**
2. Answer **ANY TWO** questions from **Part B-Computer drafting**
3. Answer **ANY ONE** question from **Part C- Computer drafting**

Q.No.	PART-A (Manual Drawing)	Marks
1	Point A is 30mm in front of VP, 20mm above HP and 25mm in front of LPP. Draw the projections.	5
2	A line AB having one of its end 10mm above HP and 15mm in front of VP is inclined at 30° to HP and 45° to VP. Its top view is 50mm long. Draw the projections of the line and find out its true length.	5
3	The hexagonal lamina of 25mm sides resting on one of its corners on HP. The lamina makes 45° with HP. Draw its front view and top view.	5
PART-B (Computer Drafting)		
4	A square prism of base sides 30mm and 60mm axis length rests on HP on one of its base edges which is inclined at 30° to VP. Draw its projections when the axis is inclined at 45° to HP.	15
5	Create a 3D model of the given part as shown in figure 1. Generate its front view, top view, profile view and isometric shaded view.	15
 <p style="text-align: center;">Figure 1</p>		
6	A pentagonal prism of 30mm base edges and 65mm axis length rests on HP with two of	15

its lateral surfaces are equally inclined to VP and nearer to it. A section plane perpendicular to VP and inclined at 45° to HP bisects the axis of the prism. Draw the development of lateral surface of retained portion of the solid.

PART-C (Computer Drafting)

7 Create a 3D assembly of Hexagonal headed bolt and nut with washer and generate the following views. Part drawings are shown in Figure 2. 10

- Front view
- Top view
- Right side view
- Isometric shaded model view.

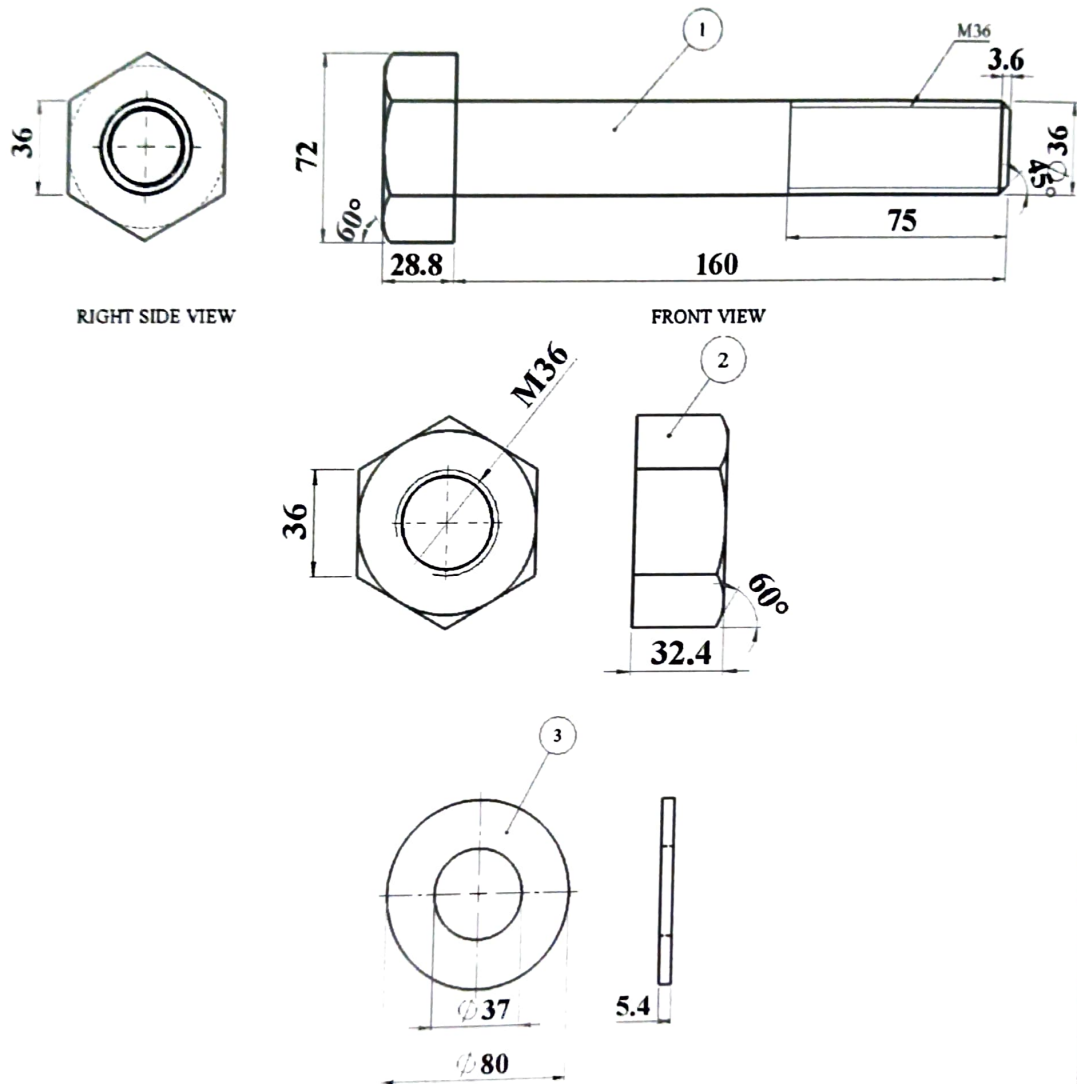


Figure 2

Part No.	Description	Quantity
1	Hexagonal headed bolt	1
2	Hexagonal nut	1
3	Washer	1

OR

8

Draw single room plan of the building as shown in Figure 3. (Scale 1 feet = 5mm)

10

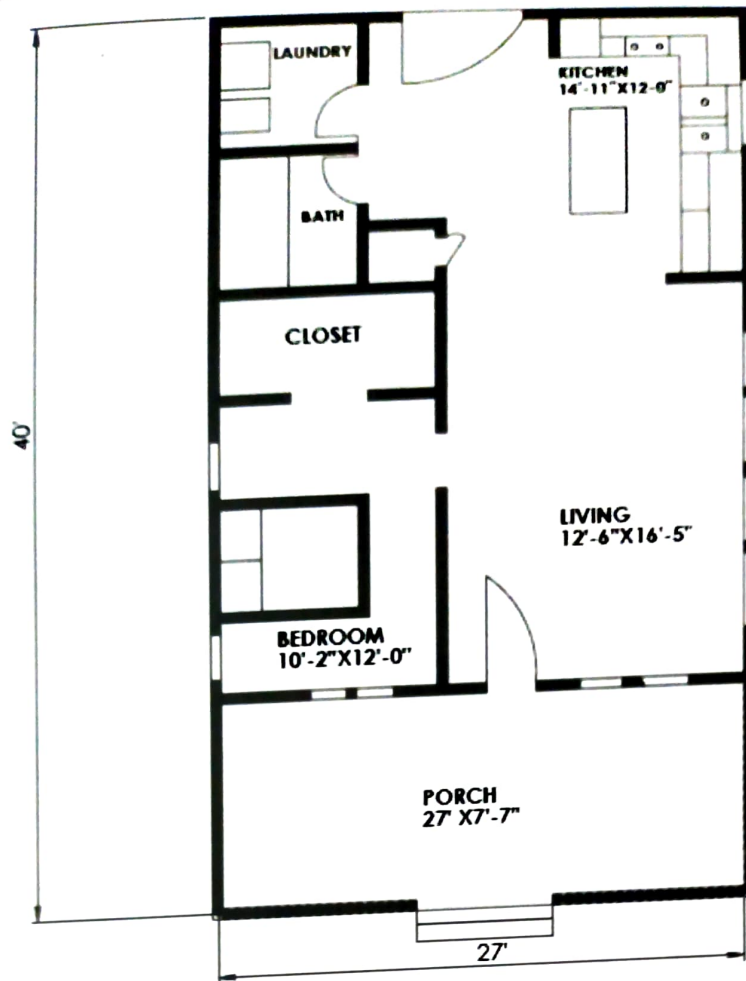


Figure 3

OR

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Draw single phase wiring circuit diagram as shown in Figure 4

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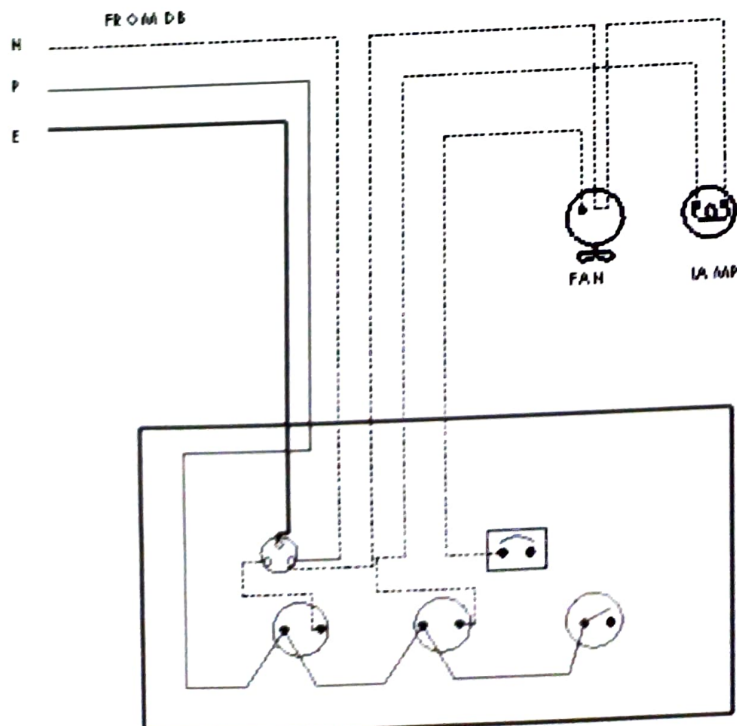


Figure 4

Draw electronic circuit diagram of RC Coupled Amplifier as shown in Figure 5

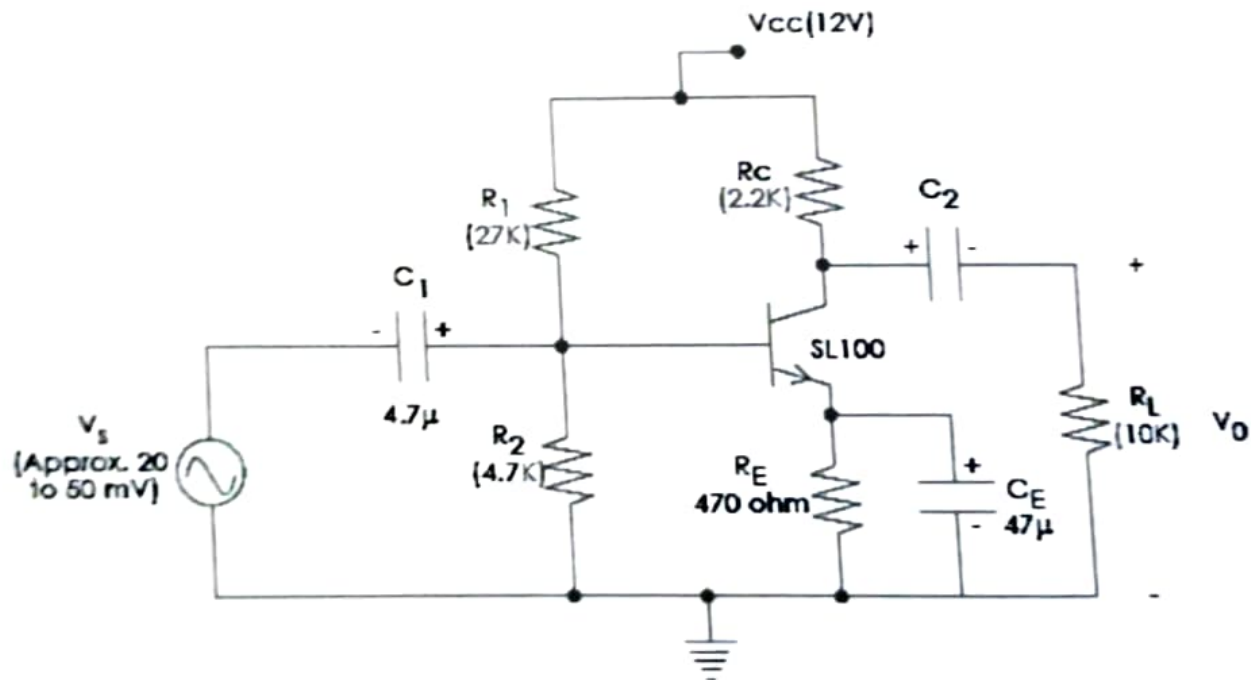


Figure 5