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Roll No.

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3rd Sem. / Electrical Engg.

**Subject : ELECTRICAL ENGINEERING
DESIGN AND DRAWING-1**

Time : 3 Hrs.

M.M. : 100

SECTION-A

Note:Very Short Answer type questions. Attempt All 15 parts. (15x2=30)

Q.1 Draw a symbols of 15 (CO-1, CO-2)

- a) Earth Electrode.
- b) Bell.
- c) Transformer.
- d) Distribution fuse board without switches (Power)
- e) Diode.
- f) Socket outlet with switch.
- g) Energy meter.
- h) Heater.
- i) Three phase motor.
- j) Voltmeter.
- k) Fuse.

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l) Switch (open).

m) MCB.

n) Light dependent switch.

o) Limit switch (NC).

SECTION-B

Note:Attempt all questions.

Q.2 Draw the schematic, wiring and single line diagram for one light, one fan and one 6 A socket to be controlled by individual switch.(20)

or

Draw the schematic, wiring and single line diagram for single stair case wiring system using two way switch (One lamp controlled by 2 switches). (CO-3,CO-4) (20)

Q.3 Draw the wiring diagram for house consisting Energy meter, main switch etc. The circuit should contain separate control panels for lighting and power control. Show at least four sub-circuit on each lighting and power circuit. (CO-5) (20)

Q.4 Draw the following views of bus bar post shown in figure 1. (CO-6) (30)

1) Front view in section looking in the direction of arrow 'A'.

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2) Side view in section looking in the direction of arrow 'B'.

3) Top view

or

The isometric view of rotor of squirrel cage induction motor is shown in figure 2.

Draw the following

1) Half sectional view.

2) End view of rotor assembly.

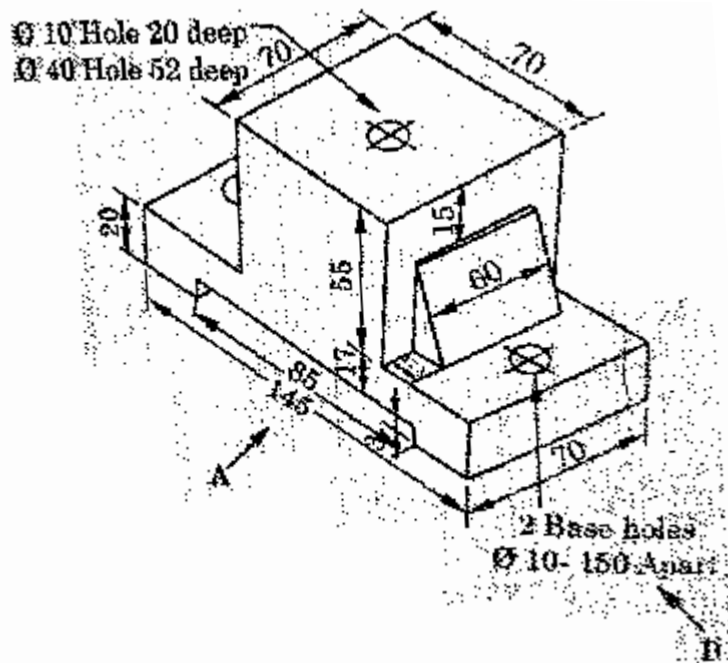


Figure no.1

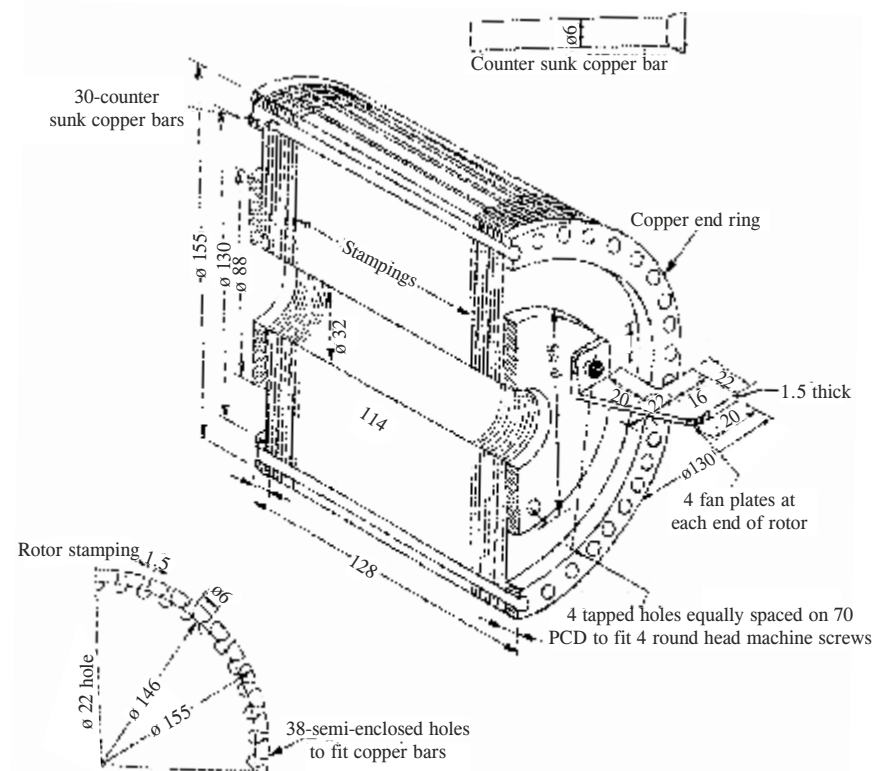


Figure no.2

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(4)

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