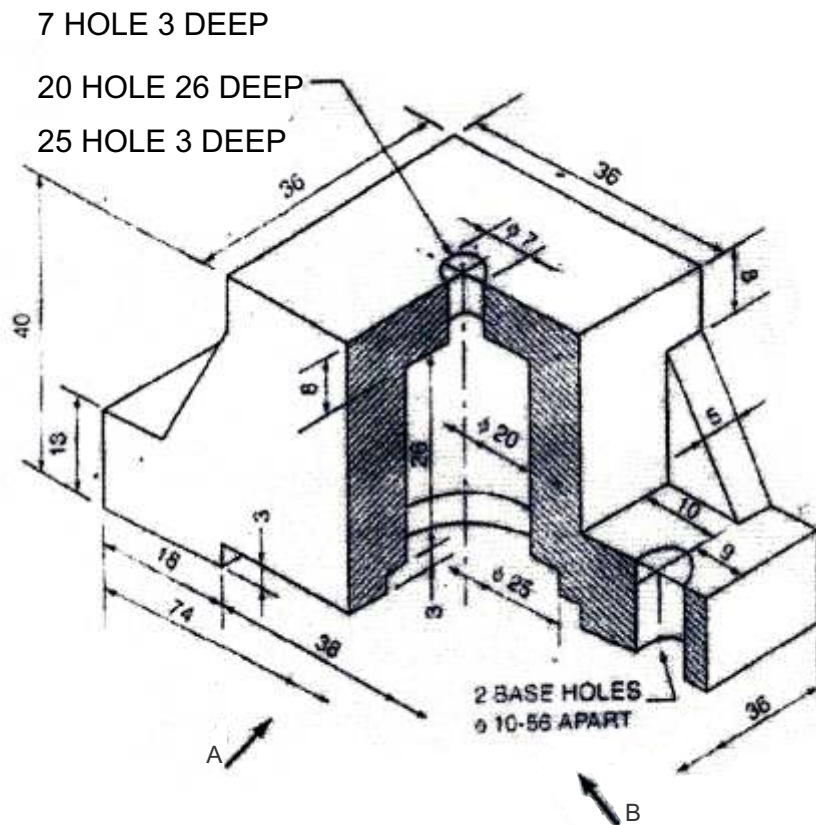


OR

Draw front view, side view, top view of bus bar post shown in the figure. Also assume rising dimension. Front view looking from A side view looking from B.



No. of Printed Pages : 4
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4th Sem. / Lect. & Eltx.

Subject : Electrical Engineering Design & Drawing

Time : 3 Hrs.

M.M. : 100

SECTION-A

Note: Solve any Five Question :-

3x5=15

- Q.1 a) Draw the symbol for thermal over load relay and semi automatic starter.
- b) Draw the symbol for tachometer, galvanometer and slip ring.
- c) Draw the symbol for single phase squirrel cage induction motor and single phase auto transformer.
- d) Draw the symbol pressure switch, two way contact and metal rectifier.
- e) Thermo couple, frequency meter and

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phase indicator.

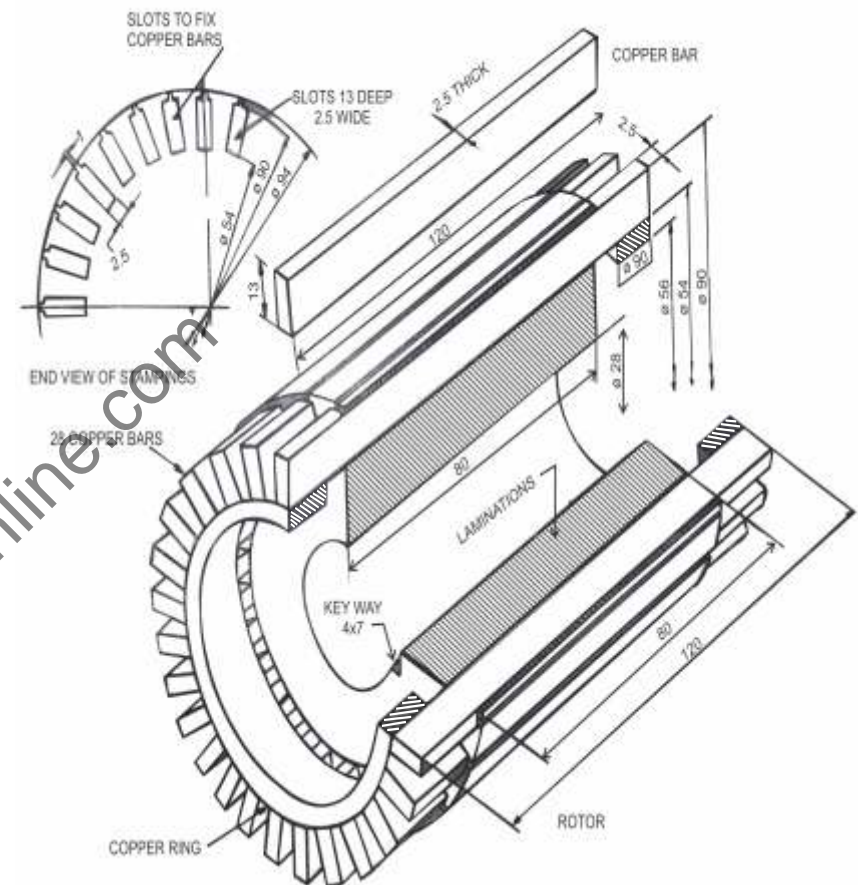
- f) Draw the symbol VAR meter, Distribution fuse board without switch "Power"
- g) Draw the symbol for neutral link, hooter and exhaust fan.
- h) What is contactor?

Q.2 Explain the CAD system in detail and name the various component and devices for making printed circuit board. 10

Q.3 Draw the schematic and wiring diagram of limit switch control of a 3 phase induction motor. 15

Q.4 Draw the schematic and wiring diagram for sequential operation of two 3 phase induction motor using time delay relay. 20

Q.5 The isometric view of a rotor of squirrel cage induction motor is shown in fig draw sectional view rotor of a squirrel cage induction motor. 20



Q.6 Design and draw the schematic and wiring diagram of DOL states of 3 phase induction motor. 20

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