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**3rd Sem. / Elect. Engg./ Power Station Engg./
Elect. & Eltx. Engg.**

Subject : Electrical Engg. Design & Drawing-I

Time : 3 Hrs. M.M. : 100

SECTION-A

Note: Very Short Answer type questions. Attempt any 15 parts out of eighteen parts. (15x2=30)

- Q.1 Draw the symbols of (CO-1, 2)
- i) Main distribution board with switches 'Power'
 - ii) Socket outlet 6A
 - iii) Cartridge fuse
 - iv) Exhaust fan
 - v) Neutral link
 - vi) Two way switch
 - vii) Circuit breaker
 - viii) Siren
 - ix) DC Generator
 - x) Energy meter
 - xi) Wattmeter
 - xii) Moving Iron instrument

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- xiii) Power factor meter
- xiv) Multimeter
- xv) Magnetic screening
- xvi) PNP Transistor
- xvii) Flood light
- xviii) Fire indicator

SECTION-B

Note: Attempt all questions.

- Q.2 Draw the schematic and wiring diagram for controlling one lamp, one tube, one fan with regulator, one bell and one 6 Amp socket (with earth terminal) to be controlled by individual switches. (20) (CO-3&4)

OR

Draw the schematic, Wiring and single line diagram for Single stair case wiring system by using appropriate switches.

- Q.3 Design and draw wiring diagram and single line diagram of a main panel of a large residential building. There should be separate control panels for lighting and power controls. There should also be a separate provision to control main supply through a double pole main switch of appropriate rating. The diagram should commence from single phase energy. The MCB

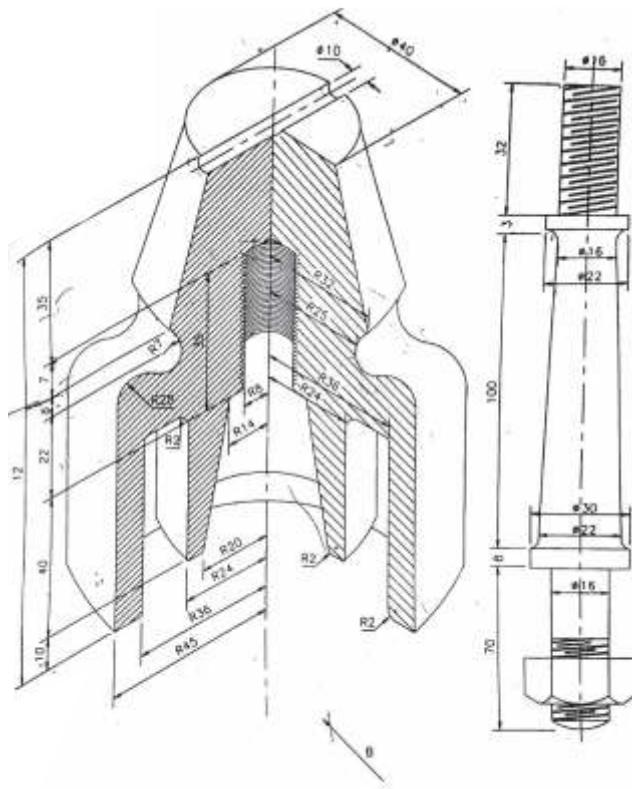
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distribution board should be suitable enough to control three light/fan/5A sub circuits and three 16A sub-circuits. (20) (CO-5)

- Q.4 A pin Type Insulator with half sectional view with pin is shown in Fig.1 (30) (CO-6)

Assemble the pin in the insulator and Draw the following views:

- a) Front view b) Top view



PIN TYPE INSULATOR
Fig.1

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OR
Draw the Front view, side and top view of bus bar post as shown in fig.2

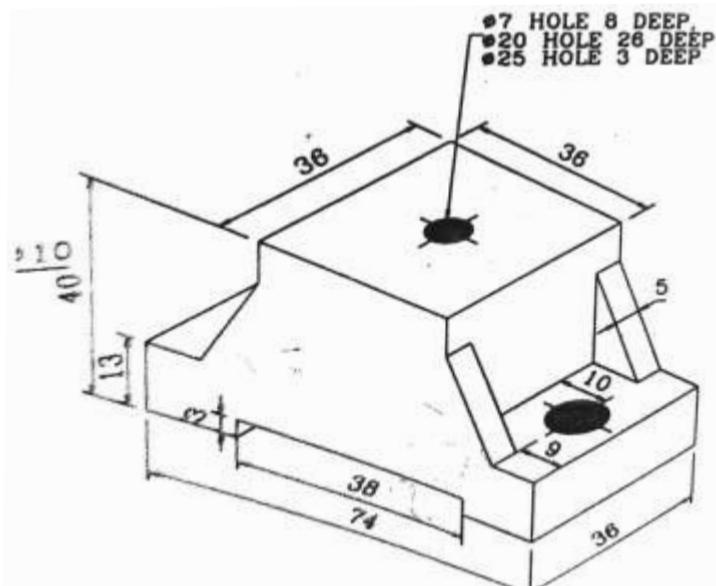


Fig.2

(2820)

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