I. Answer any three questions in this part- \( (3 \times 10 = 30) \)
1. a) Draw the symbols of any five opto electronic devices.
   b) Draw out line diagrams of any five active devices.
2. Draw cross section of an IC.
3. Draw PCB layout of CPU showing all major components.
4. Draw free hand sketch of two electrical tools.
5. Draw two views (plan & elevation) of a hollow cylinder with suitable dimensions.

II. Answer any two questions in this part- \( (2 \times 15 = 30) \)
1. Draw the circuit diagram of an IC regulated power supply with following conditions (plug, fuse, DPDT, switch, low DC voltage IC, bridge rectifier, II filter)
2. Draw the circuit diagram of AM/FM radio receiver.
3. Draw a block diagram of FM receiver. And show the wave form at each stage.

III. Draw the block diagram of memory IC.
     Or
     Draw the bus structure of 8085
     \( (15) \)

IV. Draw the orthographic view in 3rd angle projection for the object given below. \( (50) \)

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All dimensions are in mm.

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