



C23-EE-406

23440

BOARD DIPLOMA EXAMINATION, (C-23)
MARCH/APRIL—2026
DEEE – FOURTH SEMESTER EXAMINATION
ELECTRICAL ENGINEERING DRAWING

Time : 3 Hours]

[Total Marks : 60

PART—A

5×4=20

Instructions : (1) Answer **all** questions.
(2) Each question carries **five** marks.

1. Draw the sectional end view of unprotected type flange coupling with shaft diameter of 40 mm.
2. Draw a neat sketch of guarding system for H.V. line crossing over railway lines.
3. Draw the end view of DC machine with four main poles and four interpoles (Not to Scale).
4. Draw plan and elevation of three stepped core with core diameter of 50 mm and core height 70 mm.

PART—B

20×2=40

- Instructions :** (1) Answer *any two* questions.
(2) Each question carries **twenty** marks.

- 5.** Draw the half-sectional end view and elevation of armature of a DC machine with the following main dimensions :

Diameter of the shaft	:	130 mm
Diameter of the core	:	900 mm
Diameter of the hub	:	770 mm
Radius from the centre of the axle to the bolt circle	:	210 mm
Diameter of the bolt head	:	20 mm
Dimensions of ventilating duct	:	200 mm
Distance of duct from the axle centre	:	105 mm
Flange thickness	:	20 mm
Depth of flange	:	90 mm
Length of core gap equally spaced	:	230 mm with 10 mm
Total distance between two hubs	:	500 mm

Assume any missing data suitably. Take a suitable scale.

- 6.** Draw the sectional elevation and plan of single phase 230/110 V, 5 kVA transformer with the following data :

Core :

Cross-section of the core	:	Single step core
Diameter of the circumcircle	:	75 mm
Distance between the core centres	:	150 mm

Yoke :

Height of the yoke : 80 mm

LT winding :

Outside diameter of LT coil : 90 mm

Inside diameter of LT coil : 80 mm

Height of LT winding : 230 mm

No. of turns per limb : 50

HT winding :

Outside diameter of HT coil : 135 mm

Inside diameter of HT coil : 110 mm

Height of HT winding : 230 mm

No. of turns per limb : 100

Overall height of yoke and core : 400 mm

Assume any other missing data. Take a suitable scale.

7. Draw the developed winding diagram of a three-phase, single-layer lap winding of an AC machine having 4 poles 24 slots and one conductor per slot.

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