



Reg. No. :

Name :

Seventh Semester B.Tech. Degree Examination, May 2013
(2008 Scheme)
08.705 : ELECTRICAL DRAWING (E)

Time : 3 Hours

Max. Marks : 100

PART – A



Answer **any two** questions.

1. a) Draw the half sectional view of a Pin insulator. 10
- b) Draw a 220 KV double circuit transmission tower. 15
2. Draw the single line diagram of a generating station switchyard and mark all the equipments and specifications. 25
3. Draw the half sectional elevation of an armature commutator assembly for the given dimensions. 25

armature dia = 45 cm, shaft dia = 10 cm

armature core length = 22.5 cm

armature winding overhang = 15 cm.

dia of commutator = 28 cm.

length of commutator segment = 10 cm

Assume missing data.



PART – B

Answer **any one** question.

4. Draw to a suitable scale a half sectional end view and longitudinal view of a 60 hp 4 pole DC shunt motor

armature

outside dia = 18.5 cm

Length = 13.5 cm

No. of slots = 24

size of slot = 0.7×2 cm

Main pole

Total height = 11 cm Width = 7 cm

Pole arc = 10 cm Length of pole = 13 cm

Interpole

size = 2×10.8 cm length = 11 cm

Commutator

dis = 13 cm length = 10 cm

depth of field wdg = 2 cm

depth of interpole wdg = 1 cm

The armature is directly mounted on the shaft and is held between two end plates.

5. Draw the half sectional end and half sectional elevation of a 10 h.p squirrel cage motor with the following dimension.

Inside diameter of stator = 18 cm

Length of stator = 13.5 cm

Stator slot size = 0.95×2.9 cm

No. of slots = 36

Outside diameter of stator = 32 cm

Diameters of shaft below rotor = 2.4 cm. Other missing data may be assumed.