A – 3837

Reg. No. : ....

Name : ....

Seventh Semester B.Tech. Degree Examination, June 2016
(2008 Scheme)
08.705 : ELECTRICAL DRAWING (E)

Time : 3 Hours   Max. Marks : 100

PART – A

Answer **any two** questions.

1. a) Draw a 220 kV double circuit transmission tower.   15

   b) Draw the half sectional view of a disc insulator.   10

2. Draw the half sectional elevation of an armature commutator assembly for the given dimensions.

   armature dia. = 45 cm ; shaft dia. = 10 cm

   armature core length = 22.5 cm ; dia. of commutator = 28 cm

   armature winding overhang = 15 cm

   length of commutator segment = 10 cm

   Assume missing data.   25

3. Draw a single line diagram of a 220 kV substation and mark all the equipments and specifications.   25

PART – B

Answer **any one** question.

4. Draw the half sectional end view and elevation of 3-phase slip ring induction motor.

   Inside diameter of stator = 55 cm

   Stator core length = 20 cm

   Stator winding overhang on each side = 10 cm

   Length of stator frame = 38 cm

Dia. of rotor = 54.6 cm

Total length of motor = 73 cm

Height of the motor = 93.04 cm

Assume missing data.   50

5. Draw the following views of a 25 kVA, 400 V, 1500 rpm, 50 Hz three phase salient pole alternator.

   a) Half sectional elevation (top half in section)

   b) End view.

   Stator : Outside diameter = 400 mm

   Inside diameter = 290 mm

   Thickness of frame = 36 mm

   Core length = 135 mm

   Slots open type 48 no.= (32×12 mm) size

   Air gap length = 2 mm

   Rotor : Pole length = 135 mm

   Width = 70 mm

   Height with pole shoe = 75 mm

   Shaft diameter = 70 mm

   Assume reasonable values for other missing data.   50