



(Pages : 2)

D – 3401

Reg. No. :

Name :

Eighth Semester B.Tech. Degree Examination, December 2017
08.802 : DESIGN AND DRAWING OF STEEL STRUCTURES (C)
(2008 Scheme)

Time : 4 Hours

Max. Marks : 100

- Instructions :**
- 1) Answer **all** questions from Part – A and **any one full** question from **each** Module of Part – B.
 - 2) Assume **any** missing data **suitably**.
 - 3) **Use** of Sp6 (I), IS 800-1984, IS 800-2007, IS 875 (part 1, 2, 3) IS 6533, IS 1161 IS 804 IS 806 **permitted**.

PART – A

Answer **all** questions.

(2×10=20 Marks)

1. What are different types of steel water tanks ? Explain the design concept of pressed steel water tank in detail.
2. Explain the design considerations of Steel Chimney in detail.

PART – B

(2×40=80 Marks)

Module – I

3. a) Design a steel water tank with hemispherical bottom of capacity 200m^3 . Staging design not required.
- b) Draw to a suitable scale the elevation and plan of the above tank in detail.

(2×20=40 Marks)

OR

4. a) Determine the design forces in the members of a Fink Truss from the following data.

Length of building = 48 m. Width of building 16.5 m. C/C of trusses 8 m.
Height of columns 11 m. Building is located in Allahabad.

- b) Draw to suitable scale elevation and support joint details of truss mentioned above.

(2×20=40 Marks)

P.T.O.



Module – II

5. a) Design a steel chimney of 56 m height with a diameter of 2 m. The chimney is in an open land of wind zone 3 (basic wind speed 44 m/s).
- b) Draw to a suitable scale elevation, plan and foundation details of chimney.

(2×20=40 Marks)

OR

6. a) Design a plate girder bridge for MBG track for a span of 20 m.
- b) Draw to a suitable scale elevation and plan of the above bridge.

(2×20=40 Marks)
