PVP 12

Code: **CE1T4**

I B.Tech-I Semester-Regular Examinations-February 2013

INTRODUCTION TO CIVIL ENGINEERING

(For Civil Engineering)

Duration: 3hours Marks: 5x14=70

Answer any FIVE questions. All questions carry equal marks

1. (a) Derive relation between three elastic moduli. [7M]

   (b) Draw stress - strain diagram for mild steel. Indicate salient points and define them. [7M]

2. (a) Compare brick with stone as a building material? [7M]

   (b) Discuss the various tests conducted on stones. [7M]

3. (a) What are the different types of substructures and list their uses? [7M]

   (b) What are the loads and forces to be considered in the design of foundations? [7M]

4. (a) Explain with the help of neat sketches the various types of stone masonry indicating clearly the position of through stones. [7M]

(b) Compare the merits and demerits of English bond and Flemish bond. Draw also the elevation of the walls. [7M]

5. (a) Enumerate the essential characteristics of an ideal flooring to be used for a residential building. [7M]

(b) Compare the advantages and disadvantages of sloppy roof and flat roof. [7M]

6. (a) Describe the various methods of improving the bearing capacity of soils. [7M]

(b) Describe briefly the various types of foundations generally used for construction. [7M]

7. (a) What are the various factors to be considered in selection of site for road construction. [7M]

(b) Explain the components of a road with suitable sketch. [7M]

8. (a) Discuss the various points which influence the type of bridge. [7M]

(b) Name the various types of foundations generally adopted. Describe in brief the construction of any one of the foundations. [7M]