

TH3 Building Materials & Construction Technology

Full Marks: 80

Time- 3 Hrs

**Answer any five Questions including Q No.1 & 2.
Figures in the right hand margin indicates marks.**

1. Answer **All** questions. 2 x 10
 - a. What are the geological classification of rocks?
 - b. What are the functions of alumina and silica in brick earth?
 - c. Name the compounds formed during the setting action of cement.
 - d. What is the effect of increasing the water-cement ratio on strength of concrete?
 - e. What is bulking of sand?
 - f. What is seasoning of timber?
 - g. As per National Building Code of India, buildings are classified into how many groups as per occupancy? Name any four.
 - h. Differentiate between shallow and deep foundation.
 - i. Differentiate between English bond and Flemish bond.
 - j. Define these two terms;
 - a) Baluster
 - b) D.P.C.
2. Answer **Any Six** Questions. 5 x 6
 - a. State the qualities of good bricks .
 - b. Define workability. Explain the Slump Test in details.
 - c. Mention the qualities of good timber.
 - d. Classify pile foundation and write briefly.
 - e. Explain different types of staircase.
 - f. What are the aims of Energy Management in buildings?
 - g. What are the methods of damp proofing, elaborate briefly ?

Answer **Any Three** Questions.
3. Briefly explain the steps involved in the manufacture of ordinary Portland cement with a neat flow diagram. 10
4. What are the various ingredients of paints? State the functions of each of them. 10
5. Briefly explain the process of manufacture of bricks in details. 10
6. Name various types of Doors. Describe any two types of doors with neat sketches. 10
7. What is green building ? Explain in details the features or principles of Green Building. 10