

B.Tech Degree VIII Semester Examination April 2011

CE 804 A/B (b) COST EFFECTIVE BUILDING TECHNIQUES

(2006 Scheme)

Time : 3 Hours

Maximum Marks : 100

PART - A

(Answer ALL questions)

(8 x 5 = 40)

- I. (a) Write short notes on Under reamed piles.
(b) What is Brick arch foundation? What are its advantages?
(c) List out **any five** locally available materials and their applications in building process.
(d) Draw the section of rat trap bond masonry. List out the advantages of rat trap bond construction.
(e) Compare filler slabs with conventional RC slabs.
(f) What is mud stabilization and what is the purpose of stabilizing mud?
(g) List out the advantages and disadvantages of prefabrication.
(h) Explain the applications of ferrocement in building process.

PART – B

(4 x 15 = 60)

- II. Explain the various techniques that has to be considered in achieving cost effectiveness in building construction. (15)
- OR
- III. Write short notes on the following :
(i) Rope drains
(ii) Applications of bamboo in foundation
(iii) Sand piles (3 x 5 = 15)
- IV. Write short notes on the following :
(i) Lato blocks
(ii) Straw – bale construction
(iii) Stone masonry blocks (3 x 5 = 15)
- OR
- V. List out and discuss the various measures that has to be considered in reducing the cost of superstructure. (15)
- VI. Write short notes on the following :
(i) Precast reinforced concrete cored units
(ii) Precast RC joists and planks
(iii) Reinforced brick panel roofing system (3 x 5 = 15)
- OR
- VII. Illustrate any three of the innovative techniques of roofing with the help of neat sketches. (15)
- VIII. Explain the various applications of waste materials in the building process. (15)
- OR
- IX. (a) Explain various protective measures to be taken for mud construction. (5)
(b) Explain the applications of prefabrication in the construction of walls. (10)