

B. Tech Degree VIII Semester Examination, April 2010

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 Brick arch foundation.
(b) What is a slab foundation? What are its advantages?
(c) Write short notes on stabilized soil blocks.
(d) List out the advantages of locally available materials in building construction citing examples.
(e) What is a filler slab? Illustrate with the help of a neat sketch.
(f) Write short notes on precast RCC channel units.
(g) What is mud stabilization?
(h) Write short notes on ferrocement.

PART - B

(4 x 15 = 60)

- II. Explain the different innovative types of construction that can be applied for foundation. (15)
- OR**
- III. List out and explain the different aspects that we have to consider during the planning stage of building process to make it cost effective. (15)
- IV. Explain the application of different types of alternative materials that can be used for the construction of walls. (15)
- OR**
- V. Write short notes on the following :
(i) Rat trap bond
(ii) Roofing sheets from coir
(iii) Application of bamboo in building construction. (3 x 5 = 15)
- VI. Write short notes on the following :
(i) Funicular shells
(ii) Reinforced brick panel roofing systems
(iii) Roofing with cellular units. (3 x 5 = 15)
- OR**
- VII. Write short notes on the following :
(i) Cellular light weight concrete roofing units
(ii) Precast RCC joists for roofing.
(iii) Ferrocement ribbed slabs and folded plates. (3 x 5 = 15)
- VIII. What is prefabrication? Explain the applications of prefabrication in the building process. (15)
- OR**
- IX. (a) Explain the different types of techniques for mud construction. (8)
(b) Explain the different field tests to test the suitability of mud as a construction material. (7)

