

D 23512

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Name.....

Reg. No.....

THIRD SEMESTER B.Arch. DEGREE EXAMINATION, DECEMBER 2011

Architecture

CE 04 304—BUILDING TECHNOLOGY—I

Time : Three Hours

Maximum : 100 Marks

Answer all questions.

Support your answers with neat sketches wherever required.

1. (a) State the purpose and requirement of foundations.
(b) Write short notes on soil bearing capacity.
(c) Explain the types and uses of roofing materials.
(d) Describe different types of floors and floor coverings.
(e) State the qualities of water used in concrete.
(f) Write notes on concrete batching.
(g) State the criteria for concrete quality control.
(h) What are the factors that influence mix proportioning in concrete. (8 × 5 = 40 marks)

2. (a) (i) Describe the classification of buildings. (8 marks)
(ii) Enumerate the advantages and disadvantages of stone masonry. (7 marks)

Or

- (b) (i) Explain in detail the types of shallow and deep foundations. (8 marks)
(ii) Illustrate in detail about the bonds in brickwork. (7 marks)

3. (a) Explain the various types of roofs and roof coverings. (15 marks)

Or

- (b) Describe the following :—
(i) Raft foundation. (5 marks)
(ii) Shoring. (5 marks)
(iii) Pointing. (5 marks)

4. (a) (i) Explain the methods to determine the compressive strength of concrete. (8 marks)
(ii) State the causes and effects of dampness. (7 marks)

Or

- (b) (i) Elaborate the purpose of compacting factor test and slump test. (8 marks)
(ii) Explain about underpinning and scaffolding types. (7 marks)

Turn over

5. (a) Explain the following :—

- (i) Plasticizers. (5 marks)
- (ii) Mix design. (5 marks)
- (iii) Termite proofing. (5 marks)

Or

(b) Describe in detail the ingredients, properties and applications of polymer concrete.

(15 marks)

[4 × 15 = 60 marks]