

CBCS Scheme

USN

--	--	--	--	--	--	--	--	--	--

15CT45

Fourth Semester B.E. Degree Examination, June/July 2018 Building Construction

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions, choosing one full question from each module.

Module-1

- 1 a. Define foundation and discuss various functions of foundation. (06 Marks)
b. What are the purposes of site exploration? (04 Marks)
c. Define shallow and deep foundations. Explain with neat sketches. (06 Marks)

OR

- 2 a. Explain in detail the method of loading for determining safe bearing capacity of soil. (06 Marks)
b. With the help of neat sketch, explain Raft foundation. (04 Marks)
c. What are the precautions to be taken for the safety of foundations in Black cotton soil? (06 Marks)

Module-2

- 3 a. Sketch plan and elevation of consecutive two layers of English bond and Flemish Bond for $1\frac{1}{2}$ brick thick wall. (06 Marks)
b. Define the terms :
i) Sill
ii) Corbel
iii) Quoin
iv) Header bond. (04 Marks)
c. With a neat sketch explain various types of joints used in stone masonry. (06 Marks)

OR

- 4 a. Explain with neat sketch Rubble masonry and coursed Rubble masonry. (06 Marks)
b. Write short notes on :
i) Concrete partition
ii) A.C sheet partition. (04 Marks)
c. Draw the neat sketches of the following :
i) Segmental arch
ii) Relieving arch (06 Marks)

Module-3

- 5 a. Explain with neat sketches, various types of lintels. (06 Marks)
b. Briefly explain functions of Chejja. (04 Marks)
c. Name the different types of the roof covering for pitched Roofs. Explain any three. (06 Marks)

OR

- 6 a. Define roof. What are the requirements of a good roof? (06 Marks)
b. What are the advantages of steel trusses over timber trusses? (04 Marks)
c. What are the requirements of a good stair? Explain them in detail. (06 Marks)

15CT45

Module-4

- 7 a. Explain different types of plaster finishes. (06 Marks)
b. What are the advantages of pre-cast concrete floors (04 Marks)
c. Draw a neat sketch of wooden panelled door with shutter and name the parts with six panels. (06 Marks)

OR

- 8 a. Explain defects in plastering. (06 Marks)
b. Briefly explain the factors affecting the choice of flooring material. (04 Marks)
c. Write short notes on the following :
i) Bay windows
ii) Sky lights
iii) Clerestory windows. (06 Marks)

Module-5

- 9 a. List and explain the various constituents of a good oil paint. (06 Marks)
b. Give the specifications for low cost buildings :
i) Foundations
ii) Masonry in superstructure load bearing wall. (04 Marks)
c. What are the requirements of a good form work? (06 Marks)

OR

- 10 a. Explain the procedure of painting for iron and steel structures. (06 Marks)
b. Write short notes on :
i) Timber formwork
ii) Steel form work (04 Marks)
c. Write short notes on :
i) Coloring pigments
ii) Precast roofing
iii) Shuttering. (06 Marks)

* * * * *