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Roll No. :

B020414(020)

**B. Tech. (Fourth Semester) Examination,
Nov.-Dec. 2021**

AICTE (New Scheme)

(Civil Engineering Branch)

BUILDING CONSTRUCTION

Paper : (BT3020)

Time Allowed : Three hours

Maximum Marks : 100

Minimum Pass Marks : 35

Note : Attempt any three part of each questions.

***Part (a) is of each question is compulsory
and carries 4 marks. Attempt any two parts
from (b), (c) and (d) and carries 8 marks.***

Unit-I

1. (a) What are the essentials of a good foundation? 4

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- (b) What are the causes of failure of foundation? What remedial measures would you adopt? 8
- (c) Explain the help of sketches, various types of shallow foundation. 8
- (d) What do you understand by under reamed piles? Explain with sketches. 8

Unit-II

2. (a) Name different types of stone masonry. 4
- (b) Enumerate the various types of bond in brick masonry. Discuss essential features of English bond. 8
- (c) Define facing bond, raking bond, stretcher bond and header bond and the conditions when they are provided. 8
- (d) What are the advantages of cavity wall? What precautions are observed in cavity wall? 8

Unit-III

3. (a) Enumerate various types of flooring material. 4
- (b) Draw a neat diagram showing component of ground

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- floor. Explain the method of constructing cement concrete flooring. 8
- (c) Write various types of floors and explain any one, with the sketch in detail. 8
- (d) Explain in brief but with sketches types of pitched roofs. 8

Unit-IV

4. (a) What should be the characteristics of damp proofing materials? 4
- (b) What are the requirements of a good formwork? Draw a details sketch of the formwork for work for rectangular column. 8
- (c) Describe various types of pointing. Explain method of pointing. 8
- (d) Write short notes on : 8
- (i) Construction joints
- (ii) Expansion joints

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Unit-V

5. (a) Define acoustics. 4
- (b) Discuss in brief general principles and factors in acoustical design of a theatre. 8
- (c) Explain the various methods of sound insulation through the wall of a hall. 8
- (d) Explain fire resistant properties of various building materials. 8