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Roll No. :

320455(20)

B. E. (Fourth Semester) Examination 2020-

APR-MAY 2022

(New Scheme)

(Civil Branch)

BUILDING CONSTRUCTION

Time Allowed : Three hours

Maximum Marks : 80

Minimum Pass Marks : 28

Note : Attempt all questions. Part (a) of each question is compulsory and carries 2 marks. Attempt any two parts from (b), (c) and (d) which carry 7 marks each.

Unit-I

- 1. (a) Define safe bearing capacity of soil.**

- (b) What are the causes of foundation failures and explain their rectification?
- (c) Discuss about the design of foundation resting on black cotton soils.
- (d) Write short notes on :
 - (i) Expansive and Non-Expansive soil
 - (ii) Alluvial and Residual soils

Unit-II

- 2. (a) How will you define the term masonry?
- (b) Discuss various types of bonds used in brick masonry. Explain any one with the help of neat sketch.
- (c) What are the common difference between the brick masonry and stone masonry?
- (d) Explain the necessity and types of lintels with suitable sketch.

Unit-III

- 3. (a) Explain stripping time.
- (b) Explain with neat sketch pitched and flat roofs.

- (c) Draw a neat diagram showing component of ground floor. Explain the method of constructing cement concrete flooring.
- (d) What do you understand by Formwork? Explain its various types with sketches.

Unit-IV

- 4. (a) What is Damp Proof Course?
- (b) What are the causes of dampness in building?
- (c) Discuss the defects in plasters and their remedies.
- (d) What are the various considerations are taken during plastering and pointing?

Unit-V

- 5. (a) Explain the term Rise and Tread.
- (b) Explain types of stair's with sketches based on geometry.
- (c) Enumerate and discuss type of materials used for sound proofing and their properties.
- (d) Explain the common building material and their suitability in fire proof construction.