

320455 (20)

BE (4th Semester)

Examination, Nov-Dec 2021

Branch : Civil

BUILDING CONSTRUCTION (NEW)

Time Allowed : Three Hours

Maximum Marks : 80

Minimum Pass Marks : 28

Note : Attempt all questions by answering Part (a)

compulsorily and selecting any two questions

from (b), (c) and (d).

Q. 1. (a) What are the essentials of a good

foundation ?

2

(2)

(b) What are the causes of failure of foundation? What remedial measures would you adopt? 7

(c) Explain with the help of sketches and conditions when such foundations are adopted: 7

(i) Mat foundation

(ii) Grillage foundation

(d) What are the points should be kept in mind while designing a foundation in black cotton soil. Discuss in brief types of foundation in such soil. 7

(3)

Q. 2. (a) Differentiate between random rubble and ashlar stone masonry? 2

(b) Enumerate the various types of bond in brick masonry. Discuss essential features of English bond. 7

(c) Define facing bond, raking bond, stretcher bond, and header bond and the conditions when they are provided. 7

(d) What are the advantages of cavity wall?

What precautions are observed in cavity

wall? 7

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P.T.O.

(4)

- Q. 3. (a) Enumerate various types of flooring materials. 2
- (b) Draw a neat diagram showing component of ground floor. Explain the method of constructing cement concrete flooring. 7
- (c) Explain the method of laying granolithic flooring discusses its application. 7
- (d) Write various types of upper floors and explain any one, with sketch in detail. 7
- Q. 4. (a) What should be the characteristics of damp proofing materials? 2

(5)

(b) What are the requirements of a good form work? Draw a detailed sketch of the formwork for a rectangular column? 7

(c) Discuss various methods adopted for damp proofing of a building. 7

(d) Write the purpose and method of providing : 7

(i) Construction joint

(ii) Expansion joint

Q. 5. (a) Enumerate the classification of stairs based on geometry? 2

(b) Discuss in brief general principles and factors in acoustical design of a theater. 7

(6)

(c) Explain the common building materials and their suitability in fire proof construction. 7

(d) State the requirements of a good staircase.

Draw a typical plan, section of newel quarter turn stairs. 7

