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Total Number of Pages : 01

B.Tech
PCCE4203

3rd Semester Back Examination 2017-18
BUILDING MATERIALS AND BUILDING CONSTRUCTION

BRANCH : CIVIL

Time : 3 Hours

Max Marks : 70

Q.CODE : B1218

Answer Question No.1 which is compulsory and any five from the rest.
The figures in the right hand margin indicate marks.

Q1 Answer the following questions: (2 x 10)

- a) What is the purpose of provision of *frog* in a brick?
- b) State the chemical composition of cement.
- c) Differentiate between *segregation* and *bleeding*.
- d) State the chemical constituents of cement.
- e) State the various materials used for damp proofing.
- f) What do you mean by pitch of a stair? What is its limit?
- g) In what situation, pile foundation is recommended?
- h) Show the figure of a dog legged stair.
- i) Explain the term, "*dado*" with reference to plastering.
- j) State the different methods adopted for brick manufacturing.

Q2 a) Describe any suitable method of manufacture of cement. (7)
b) What are the advantages of a cavity wall? (3)

Q3 a) Explain the properties of a good mortar. (5)
b) Draw a typical sketch showing the details of a stair. Explain different terms used in a stair. (5)

Q4 a) What are the causes and effects of dampness in buildings? State the materials and methods used for prevention of dampness. (5)
b) Explain the characteristics of a English bond brick joint showing its elevation. (5)

Q5 a) Discuss various causes of cracks in building? How these can be overcome? (5)
b) Explain various types of brick masonry. (5)

Q6 a) What are the common defects of plastering? Explain the remedies in brief. (5)
b) Discuss the construction of a terrazzo flooring. (5)

Q7 a) Explain the functions of a foundation and its essential requirements? (5)
b) Classify the types of piles based on (i) function and (ii) materials and composition. (5)

Q8 Explain the following in brief (Any Two) (5x2)

- a) Damp proof course
- b) Reinforced brick work
- c) Mix design
- d) Spread footing