

Registration no:

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

Total Number of Pages: 2

B.Tech
PCCE4203

3RD Semester Back Examination 2016-17
BUILDING MATERIALS AND BUILDING CONSTRUCTION
BRANCH: CIVIL
Time: 3 Hours
Max Marks: 70
Q.CODE: Y575

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 are the raw materials used in the manufacture of cement?
 - b) What is the compressive strength of first class brick?
 - c) Define workability of concrete.
 - d) Name four different types of useful Indian stones.
 - e) State various types of stairs.
 - f) State various types of binders used for plastering.
 - g) What do you mean by *bull nose* brick.
 - h) State the methods adopted for stone quarrying.
 - i) Explain the term "dado" in reference to plastering.
 - j) What do you mean by rubble masonry?
- Q2** Describe the dry process of manufacture of cement. Draw a figure and show various stages. **(10)**
- Q3**
- a) Explain the various types of stone masonry with neat sketches. **(5)**
 - b) Make a comparison between stone masonry and brick masonry. **(5)**
- Q4**
- a) Explain the workability of concrete. How the workability of a concrete sample is measured? **(5)**
 - b) What is concrete mix design. **(5)**
- Q5**
- a) Discuss various causes of cracks in building. How these should be removed? **(5)**
 - b) What are the common defects in plastering? What are their causes and remedies? Discuss. **(5)**

210 210 210 210 210 210 210 210

Q6 a) What is integral waterproofing? How is it constructed? Explain with sketches. **(5)**

210 210 210 210 210 210 210 210

b) Write short notes on: **(5)**

- i) balustrade
- ii) spandrel
- iii) newel post

Q7 Explain the functions of a foundation and its essential requirements. Describe various types of spread footings. **(10)**

210 210 210 210 210 210 210 210

Q8 Write short answer on ANY TWO: (2 X 5)

- a)** Flemish bond
- b)** Cavity walls
- c)** Hydration of cement
- d)** Artificial stones

210 210 210 210 210 210 210 210