

(Please write your Exam Roll No.)

Exam Roll No. 05125603414

## END TERM EXAMINATION

THIRD SEMESTER [B.TECH] DECEMBER 2015-JANUARY 2016

Paper Code: ETCE-207

Subject: Building Materials & Construction

Time: 3 Hours

Maximum Marks: 75

Note: Attempt any five questions including Q.no.1 which is compulsory.  
Select one question from each unit.

Q1 Write short notes on the following:

(2.5x10=25)

- (a) Polymer concrete.
- (b) Composition of cement.
- (c) Hollow block.
- (d) Admixtures.
- (e) Damp proofing.
- (f) Define Surkhi and flyash in brief.
- (g) Distinguish between escalator and ordinary stair.
- (h) Distinguish between flush doors and Louvered doors.
- (i) Explain air conditioning and its capacity estimation.
- (j) Describe the properties of Driers.

### Unit-I

- Q2 (a) Explain the properties of Timber in brief. (6)  
(b) Write a detailed note on sound proofing and also discuss the materials used in sound proofing. (6.5)
- Q3 (a) Discuss the composition of paint in brief. (4)  
(b) Discuss the properties of Bitumen, Tar and Asphalt in detail. (8.5)

### Unit-II

- Q4 (a) Discuss the batching of concrete by weight & volume in brief. (6.5)  
(b) What do you understand by Compacting factor? Describe the test procedure to determine this factor. (6)
- Q5 (a) Discuss Ferro-cement & shotcrete-steel fiber reinforced concrete in detail. (6)  
(b) What do you understand by the term workability? Discuss the major factors. (6.5)

### Unit-III

- Q6 (a) What do you mean by term foundation? Discuss in detail. (6)  
(b) Define the pitched roofs construction and their components in brief. (6.5)
- Q7 (a) Discuss the various characteristic features of Green Building & its construction detail. (6.5)  
(b) Distinguish between bearing wall, partition wall and cavity walls. (6)

### Unit-IV

- Q8 (a) Discuss with sketches various kinds of doors & windows. (8.5)  
(b) Write a note on different types of flat roofs and add sketches to illustrate their constructions. (4)
- Q9 (a) Explain Fire? Classify various types of fire resistant materials & their use in constructions. (6.5)  
(b) What do you mean by arches? Classify various types of arches in detail. (6)

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