Code: EC6T6FE-A, ME6T6FE-B.

III B.Tech - II Semester – Regular Examinations – May 2017

BUILDING MATERIALS AND CONSTRUCTION

(Common for ECE & ME)

Duration: 3 hours Max. Marks: 70

PART - A

Answer all the questions. All questions carry equal marks

 $11 \times 2 = 22 \text{ M}$

1.

- a) List any four types of common building stones in India with their application.
- b) Write any 4 qualities of a brick to be regarded as "Good Brick".
- c) State any four market forms of Timber.
- d) How does carbon content effect the ductility property of steel?
- e) List any four market forms of steel used in Construction.
- f) Present the steps to be followed in painting new iron and steel work
- g) What is "pressure grouting"?
- h) Write any four rules for attaining good bonding in brick masonry construction.
- i) Give a brief note on "FALGY" bricks.
- j) Enlist any 4 material used for DPC with their application.

k) Brief on stripping time of form work for various structural elements of RCC buildings.

PART - B

Answer any *THREE* questions. All questions carry equal marks. $3 \times 16 = 48 \text{ M}$

- 2. a) Justify the usage of fly ash as substitute to burnt clay bricks.

 5 M
 - b) Propose the advantages of brick masonry over the stone masonry.

 6 M
 - c) Present the purpose of any 4 blasting tools 5 M
- 3. a) Give the comparisons on "Fat lime" Vs. "Hydraulic Lime".
 - b) Explain the procedure for natural seasoning of Timber along with its merits and demerits.6 M
 - c) Brief on "Thermo Mechanically Treated Bars" (TMT). 4 M
- 4. a) Write down the objectives and characteristics of an ideal paint.

 6 M
 - b) "White wash is extensively used for interior wall surface and ceiling of houses" Discuss the reasons. 5 M

c) Explain with examples –"Sound Proof/Sound Absorbe Material".	nt 5 M
5. a) Discuss on the functions of foundations in civil engine structures.	eering 6 M
b) Explain the different types of shallow foundations wit neat sketches.	6 M
c) Discuss on the defects in brick masonry, causes and precautions.	4 M
6. a) Present the details of a "King Post Truss" with a neat sketch.	5 M
b) Explain the method of laying "Tiles Flooring".	5 M
c) Discuss the purpose and types of different types of for work & scaffolding materials.	rm 6 M