

Reg. No.

# Manipal Institute of Technology, Manipal

(A Constituent Institute of Manipal University)



## III SEMESTER B.TECH (CIVIL ENGINEERING)

### END SEMESTER EXAMINATIONS, NOV/DEC 2015

SUBJECT: BUILDING SCIENCE AND TECHNOLOGY [CIE- 2103]

#### REVISED CREDIT SYSTEM

Time: 3 Hours

MAX. MARKS: 50

#### Instructions to Candidates:

- ❖ Answer **ALL** the questions.
- ❖ Missing data may be suitable assumed.

1A.	Name properties of good mortar.	3
1B.	With the help of a neat sketch explain features of Flemish bond	3
1C.	Explain various terms of Arch masonry with the help of figure.	4
2A.	Explain various classifications of bricks.	3
2B.	Explain in details i) Fat lime ii) Hydraulic lime iii) Poor lime	3
2C.	Explain with shoring ,underpinning and scaffolding	4
3A.	What is meant by seasoning of timber? Explain any two methods of seasoning.	3
3B.	Write short note on: (i) Properties of rubber (ii) Characteristics of an ideal paint	3
3C.	What is meant by 'BOGUE' compounds? Explain the role of each compound.	4
4A.	How does the geometry and surface texture of Aggregates affect the fresh properties of concrete	5
4B.	What is membrane curing?.	2
4C.	Explain the features of fresh concrete with respect to slump.	3
5A.	How does porosity affect the strength and durability characteristics of concrete	3
5B.	Explain the stress strain behavior of hardened concrete with graph.	3
5C.	How will you obtain high strength concrete?	4