

Reg. No.

Manipal Institute of Technology, Manipal

(A Constituent Institute of Manipal University)



V SEMESTER B.TECH (CIVIL ENGINEERING)

END SEMESTER EXAMINATIONS, NOV/DEC 2015

SUBJECT: BUILDING CODE AND REQUIREMENTS [CIE 327]

REVISED CREDIT SYSTEM

Time: 3 Hours

MAX. MARKS: 50

Instructions to Candidates:

- ❖ Answer **ANY FIVE FULL** the questions.
- ❖ Missing data may be suitable assumed.

1A.	Explain the general building requirements for low income housing in urban areas.	4
1B.	Explain the provisions of water seal latrine in the case of low income housing	2
1C.	Explain the salient features of National Building Code 2005	4
2A.	What are the various systems of fire extinguishing?	4
2B.	What is a fire tower? List the requirements of a fire lift in building	3
2C.	Explain the importance of pressurization technique enumerating the systems of pressurization?	3
3A.	What are the shortfalls of 1964 wind code which was added in IS 875-1987?	4
3B.	Explain the term solidity ratio, return period and effective frontal area	3
3C.	Explain the effect of external and internal pressure coefficients in wind load design of building	3
4A.	Explain any two types of foundation with neat sketch	4
4B.	Explain static cone penetration test to determine the modulus of elasticity of soil with neat sketch	4
4C.	Briefly explain the kind of foundation required in a building resting on black cotton soil.	2
5A.	Define curtain wall and faced wall with diagram	4
5B.	List out the vertical reinforcement provisions in earthquake resistant masonry structures.	3
5C.	What are the assumptions taken in earthquake resistant design of building?	3
6A.	What are the various factors taken in cooling tower selection in industry processing systems	4
6B.	What is the difference between combined and partially separate systems of sewerage	3
6C.	A class room of size 12m x 10m x 3m has a working plane at 0.7m above the floor. Calculate the number of lamps and spacing to be provided to ensure sufficient lighting when 4100 lm lamps are used	3