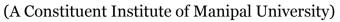




Manipal Institute of Technology, Manipal





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 |
|--------------|--|---|
| 1 B . | 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 |
| 2 B . | What is a fire tower? List the requirements of afire 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 1mlamps are used | 3 |