

B.TECH. - I SEMESTER - II (ALL BRANCHES)

CICH 106 BASIC OF CIVIL & ENVIRONMENTAL ENGINEERING

THEORY:

1. Introduction to civil Engineering, relation of civil engineering to other branches of engineering.
2. Principles of Surveying Linear Measurement, Compass Surveying, Principles of Levelling
3. Basic building materials, properties of building materials, different types of building materials like stone, brick, cement, lime, mortar, cement concrete etc.
4. Different building components, their types and construction techniques – foundation, masonry (Stone/brick), floors, roofs, staircase, doors / windows etc.
5. Different types of road, bridges, dams etc.
6. Importance of Environmental Engineering, component of environment and their interaction, man & the biosphere, impact of development on environment, natural resources, environmental Pollution (air, water, soil, noise).

REFERENCES:

1. G.S. Birdi, "Basic Civil Engineering", Dhanpat Rai & Sons Publication (1994).
2. Dr. J. N. Patel & Dr. M. B. Gohil, "Basic Civil Engineering", Atul Prakashan, Ahmedabad, Gujarat (1999).
3. Shamnugam and Palaniswamy, "Basic Civil Engineering", TMG Publication (1995).
4. Basak, "Surveying and Levelling", TMG Publications (1994).
5. S.C. Rangwala, "Engineering Materials", Charotar Publishers, Anand, Gujarat. (1999).
6. Benny Joseph, "Environmental Studies", Tata McGraw Hill Publication Co. Ltd., New Delhi (2005).
7. Dr. Suresh K. Dhameja, "Environmental Studies", S.K. Kataria & Sons, New Delhi (2006).