**17CE2103 - BUILDING PLANNING AND DRAWING**

**(Civil Engineering)**

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| **Course Category** | Professional Core | **Credits** | 3 |
| **Course Type** | Theory | **Lecture - Tutorial - Practical** | 1-0-3 |
| **Prerequisite** | Building Materials and  Building Construction | **Sessional Evaluation** | 40 |
| **Semester End Exam Evaluation** | 60 |
| **Total Marks** | 100 |

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| **Course Objectives** | 1. To understand and apply the basic concepts of building drawing as per NBC standards. 2. To understand the basics of planning of different types of buildings. 3. To prepare plans, sections and elevations of G + 1 buildings. 4. To execute the plan for residential buildings. 5. To illustrate various components of buildings. 6. To prepare detailed drawing for residential buildings. | |
| **Course Outcomes** | CO1 | Understand the terms in building drawing, and able to apply the NBC standards in building drawing. |
| CO2 | Understand the basics of planning of different types of buildings. |
| CO3 | Prepare plans, sections and elevations of G + 1 buildings. |
| CO4 | Familiar with plan approval procedure. |
| CO5 | Draw various components of buildings using conventional symbols. |
| CO6 | Prepare detailed drawings of a two storey building. |
| **Course Content** | **PART-A (Theory)**  **INTRODUCTION:** Terms used in building drawing as per NBC – Factors affecting in selection of site – Functional requirements of a residential building – Minimum size requirements as per NBC – Standard sizes of door, windows and ventilators.  **PLANNING:** Principles of planning – Factors to be considered in planning – Planning of residential, Office, School and Hospital buildings – Preliminaries of vaastu – Municipal bye-law – List of documents to be submitted for building plan approval.  **PART-B (Drawing)**  Standard conventional signs and symbols used in Civil Engineering Drawing – Bonds in brick masonry – Paneled and flush doors – Glazed windows – Steel roof truss.  Preparation of plan, section and elevation of simple residential buildings with flat roof not exceeding two storeys.  **EVALUATION:**   1. For university examination, two out of three questions to be answered from Part–A (Theory) for 30 marks (i.e. 2x15=30). And one compulsory drawing question to be answered from Part-B (Drawing) for 30 marks (i,e.1x30=30) 2. For internal evaluation, a weightage of 20 marks out of a total of 40 marks to be given for day‑to‑day work. | |
| **Textbooks**  **and Reference books** | **TEXTBOOKS:**   1. Building Planning and Drawing by Dr. N. Kumara Swamy & A. Kameswara Rao. 2. Building Planning Design and Scheduling by Gurucharan Singh & Jagadish Singh. 3. Building Planning and Drawing by S.S. Bhavikatti and M.V.Chitawaagi.   **REFERENCE BOOKS:**   1. Building Drawing by Shah M.H and Kale C.M. 2. NBC of India -2016 ( Vol.I & Vol.II ). 3. Model Building Bye-laws -2016 govt. of A.P building rules – 2017. | |