**NBKR INSTITUTE OF SCIENCE & TECHNOLOGY :: VIDYANAGAR**

*(AUTONOMOUS)*

**CIVIL ENGINEERING**

SCHEME OF INSTRUCTION AND EVALUATION

(With effect from the batch admitted in the academic year 2013-2014)

**II YEAR OF FOUR YEAR B.TECH. DEGREE COURSE – II SEMESTER**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| S.  No. | | Course  Code | Course Title | Contact Hours/  Week | | | Cred-its | Evaluation | | | | | | | | | |
| Sessional  Test-I | | Sessional  Test-II | | | Total Sessional Marks (Max. 40) | Semester End  Examination | | Max.  Total Marks | |
| **THEORY** | L | P | T |  | Duration  in Hours | Max.  Marks | Duration  in Hours | | Max.  Marks | 0.8(Better of two sessional tests)  +  0.2(Other) | Duration  in Hours | Max.  Marks |  | |
| 1 | | 13CE2201 | Strength of materials | 3 | - | 1 | 4 | 2 | 40 | 2 | | 40 | 3 | 60 | 100 | |
| 2 | | 13CE2202 | Fluid Mechanics - II | 3 | - | 1 | 4 | 2 | 40 | 2 | | 40 | 3 | 60 | 100 | |
| 3 | | 13CE2203 | Soil Mechanics | 3 | - | 1 | 4 | 2 | 40 | 2 | | 40 | 3 | 60 | 100 | |
| 4 | | 13CE2204 | Transportation Engineering - I | 4 | - | - | 4 | 2 | 40 | 2 | | 40 | 3 | 60 | 100 | |
| 5 | | 13CE2205 | Building Planning & Drawing | 1 | 3 | - | 4 | 2 | 40 | 2 | | 40 | 3 | 60 | 100 | |
| 6 | | 13CE2206 | Surveying - II | 3 | - | 1 | 4 | 2 | 40 | 2 | | 40 | 3 | 60 | 100 | |
|  | | | **PRACTICALS** |  |  | | | | | | | |  |  | | | |
| 1 | 13CE22P1 | | Surveying Laboratory - II | - | 3 | - | 2 | - | - | | - | - | Day-to-day Evaluation and a test | 3 | 60 | | 100 |
| 2 | 13CE22P2 | | Fluid Mechanics & Hydraulic Machinery Laboratory | - | 3 | - | 2 | - | - | | - | - | 3 | 60 | | 100 |
|  |  | | **TOTAL** | **17** | **09** | **04** | **28** |  |  | |  |  |  |  | | **800** |

**Note:-** *Survey camp for a duration of 10 days to be conducted before the last day of instruction for II B.Tech, II – Sem. This shall be evaluated as part of Survey Laboratory –II.*

**13CE2205 - BUILDING PLANNING AND DRAWING**

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| --- | --- | --- | --- |
| **Course category:** | Program core | **Credits:** | 4 |
| **Course Type:** | Theory | **Lecture - Tutorial - Practical:** | 1 - 3 - 0 |
| **Prerequisite:** | **Building Technology** | **Sessional Evaluation :**  **Univ.Exam Evaluation:**  **Total Marks:** | 40  60  100 |

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| **Course Outcomes** | CO1 | Understand the terms in building drawing, and able to apply the NBC standards in building drawing. |
| CO2 | Be able to plan various types of buildings. |
| CO3 | Be familiar with plan approval procedure. |
| CO4 | Be able to draw various components of buildings. |
| CO5 | Be able to prepare detailed drawings of a two story 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. | |
| **Text Books and reference Books:** | **TEXT BOOKS:**   1. Building Planning and Drawing by Dr. N. Kumara Swamy & A. Kameswara Rao 2. Building Planning Design and Scheduling by Gurucharan Singh & Jagadish Singh   **REFERENCE BOOKS:**   1. Building Drawing by Shah M.H and Kale C.M.   Civil Engineering Drawing & House planning by B.P.Verma. | |