**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)

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

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| S.No. | Course  Code | Course Title | Contact  Hours/  Week | | | Credits | 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 | 13CE4201 | Design & Drawing Of Irrigation Structures | 1 | 3 | - | 4 | 2 | | 40 | 2 | 40 | 3 | 60 | 100 | |
| 2 | 13CE4202 | Environmental Studies | 4 | - | - | 4 | 2 | | 40 | 2 | 40 | 3 | 60 | 100 | |
| 3 | 13CE42EX | Elective - III | 4 | - | - | 4 | 2 | | 40 | 2 | 40 | 3 | 60 | 100 | |
|  | | **PRACTICALS** |  |  | | | | | | | |  |  | | | |
| 1 | 13CE42P1 | CAAD Laboratory | - | 3 | - | 2 | | - | - | - | - | Day to day evaluation and a test  (100 Marks) |  | - | | 100 |
| 2 | 13CE42PR | Project Work | - | 3 | - | 6 | | - | - | - | - | Continuous Assessment and seminar  (80 Marks) |  | 120 | | 200 |
|  |  | **TOTAL** | **09** | **09** |  | **20** | | **6** | **-** | **6** | **-** | **300** | **9** | **300** | | **600** |

**Elective – III:**

13CE42E1 Remote Sensing & GIS 13CE42E2 Finite Element Analysis

13CE42E3 Advanced Highway Engineering 13CE42E4 Ground Improvement Techniques

13CE42E5 Environmental Pollution and Control

**13CE4201 - DESIGN AND DRAWING OF IRRIGATION STRUCTURES**

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

|  |  |  |
| --- | --- | --- |
| **Course Outcomes** | CO1 | Be able to design surplus weir |
| CO2 | Be able to design tank sluice with tower head |
| CO3 | Be able to design canal drop and canal regulator |
| CO4 | Be able to design syphon well drop |
| CO5 | Be able to design syphon aqueduct. |
| **Course Content** | **Design and Drawing of**   1. Surplus weir 2. Tank sluice with a tower head 3. Canal drop-notch type 4. Syphon well drop 5. Canal regulator 6. Syphon Aqueduct ( Type – II)   ( Under tunnel) | |
| **Text Books and reference Books:** | **TEXT BOOKS:**   1. “Water Resources Engineering Principles and Practice” by C.S. Murthy.   **REFERENCE BOOKS:**  1. “Irrigation Engineering Structures” by Elhis.  2. “Irrigation Engineering and Hydraulic Structures” by Sharma R.K. | |