**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 – I 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 | 13CE4101 | Environmental Engineering – II | 4 | - | - | 4 | 2 | | 40 | 2 | 40 | 3 | 60 | 100 | |
| 2 | 13CE4102 | Irrigation & Hydraulic Struc.. | 4 | - | - | 4 | 2 | | 40 | 2 | 40 | 3 | 60 | 100 | |
| 3 | 13CE4103 | Quantity Surveying & Valuation | 3 | - | 1 | 4 | 2 | | 40 | 2 | 40 | 3 | 60 | 100 | |
| 4 | 13CE4104 | Construction Planning & Management | 3 | - | 1 | 4 | 2 | | 40 | 2 | 40 | 3 | 60 | 100 | |
| 5 | 13SH4101 | Economics & Accountancy | 4 | - | - | 4 | 2 | | 40 | 2 | 40 | 3 | 60 | 100 | |
| 6 | 13CE41EX | Elective – II | 4 | - | - | 4 | 2 | | 40 | 2 | 40 | 3 | 60 | 100 | |
|  | | **PRACTICALS** |  |  | | | | | | | |  |  | | | |
| 1 | 10CE41P1 | Concrete Technology Laboratory | - | 3 | - | 2 | | - | - | - | - | Day-to-day Evaluation and a test | 3 | 60 | | 100 |
| 2 | 10CE41P2 | Environmental Engineering Laboratory | - | 3 | - | 2 | | - | - | - | - | 3 | 60 | | 100 |
|  |  | **TOTAL** | **22** | **06** | **02** | **28** | | **12** | **320** | **12** | **320** | **24** | **480** | | **800** |

**Elective – II:**

13CE41E1 Prestressed concrete structures

13CE41E2 Advanced structural design

13CE41E3 Solid waste management

13CE41E4 Traffic engineering

13CE41E5 Applied soil mechanics

13CE41E6 Bridge engineering

**13SH4101 ECONOMICS & ACCOUNTANCY**

|  |  |  |  |
| --- | --- | --- | --- |
| **Course category:** | Program core | **Credits:** | 4 |
| **Course Type:** | Theory | **Lecture - Tutorial - Practical:** | 3 - 1 - 0 |
| **Prerequisite:** | None | **Sessional Evaluation :**  **Univ.Exam Evaluation:**  **Total Marks:** | 40  60  100 |

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| **Course Outcomes** | CO1 | Able to demonstrate an ability to define analyze and identify the appropriate solution to a business problem using sound economic and accounting principles. |
| CO2 | Able to know the role of various cost concepts in managerial decisions and also the managerial uses of production function. |
| CO3 | Able to understand to take price and output decisions under various market structures. |
| CO4 | Able to know in brief formalities to be fulfilled to start a business organisation. |
| CO5 | Able to analyse the firm’s financial position with the techniques of economic aspects as well as financial analysis. |
| **Course Content** | **UNIT – I**  **Demand Analysis:** Definition and basic concepts of Economics – consumer’s equilibrium: Marginal Utility Analysis - the concept of Demand - Law of demand – Elasticity of Demand: Types, determinants and its importance.  **UNIT – II**  **Theory of Production and Cost and Banking :** Production function – Cobb – Douglas production function and its properties – Law of variable proportions – Law of Returns to Scale – Cost concepts – Revenue curves – Break-Even Analysis-Money-functions of Money-Functions of Commercial Banks-Features of Indian Economy.  **UNIT – III**  **Theory of Pricing:** Classification of markets – Pricing under perfect Competition – Pricing under Monopoly – Price discrimination – Monopolistic Competition.  **UNIT – IV**  **Types of Business Organizations:** Sole tradership, partnership and Joint Stock Companies – Formation of companies - Shares and debentures.  **UNIT – V**  **Financial & Management Accounting:** Concepts and principles, Journal and Ledger, Trial Balance, Final Accounts: Trading account, Profit and Loss account and Balance Sheet.  Basic concepts in Capital Budgeting process and Methods – Working Capital: operating cycle, factors and sources | |
| **Text Books and reference Books:** | **TEXT BOOKS:**  1. Management Accounting : S N Maheswari  2. Economic Analysis : K. Sankaran  3. Elementary Book keeping &  Principles of Commerce : K.sanyasaiah  **REFERENCES**:   1. Double entry book keeping : Battlibai 2. Cost Accounting : Jain and Narang 3. Managerial Economics : Maheswari and Varshaney | |