

LESSON PLAN

| Name of the Institute : | | C.V. RAMAN POLYTECHNIC, BHUBANESWAR |
|--|--|-------------------------------------|
| Department : | | CIVIL ENGINEERING |
| Semester/Division/Branch : | | 3 RD / CIVIL |
| Subject Name with code : | | STRUCTURAL MECHANICS (TH.1) |
| Total No. of Class (Required) : | | 75 |
| Faculty Name : | | SAFALYA MOHANTY |
| Class No. | Brief Description of the Topic/Chapter to be taught | Remarks |
| 1 | Review Of Basic Concepts | |
| 2 |DO..... | |
| 3 |DO..... | |
| 4 |DO..... | |
| 5 | Simple & Complex Stress,Strain | |
| 6 | Introduction to stresses & strain | |
| 7 |DO..... | |
| 8 | Types of Stresses | |
| 9 |DO..... | |
| 10 | Types of Strain | |
| 11 |DO..... | |
| 12 |DO..... | |
| 13 | Hook's Law_Elastic constant | |
| 14 |DO..... | |
| 15 | Derivation of Relationships | |
| 16 |DO..... | |
| 17 | Applications of simple stress & strain in Engg field | |
| 18 |DO..... | |
| 19 |DO..... | |
| 20 | Complex stress & strain | |
| 21 |DO..... | |
| 22 |DO..... | |
| 23 | Stresses in Beams | |
| 24 |DO..... | |
| 25 | stresses in beams due to bending | |
| 26 |DO..... | |
| 27 |DO..... | |

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| 28 |DO..... | |
| 29 | Shear stresses in beams | |
| 30 |DO..... | |
| 31 | Stresses in shaft due to torsion | |
| 32 |DO..... | |
| 33 |DO..... | |
| 34 | Combined Bending & Direct Stresses | |
| 35 |DO..... | |
| 36 | Columns & Structs | |
| 37 |DO..... | |
| 38 |DO..... | |
| 39 |DO..... | |
| 40 | Shear force & Bending moment | |
| 41 |DO..... | |
| 42 | Types of loads and Beams | |
| 43 |DO..... | |
| 44 | Types of Support | |
| 45 |DO..... | |
| 46 | Types of Reactions | |
| 47 |DO..... | |
| 48 | Types of Beam based on Support Condition | |
| 49 |DO..... | |
| 50 | Calculation Of Static Equilibrium | |
| 51 |DO..... | |
| 52 | Shear force & Bending moment in Beams | |
| 53 |DO..... | |
| 54 |DO..... | |
| 55 |DO..... | |
| 56 | Slope & Deflection | |
| 57 |DO..... | |
| 58 | Introduction | |
| 59 |DO..... | |
| 60 |DO..... | |
| 61 | Cantilever & Simply Supported Beam By Different Methods | |
| 62 |DO..... | |
| 63 |DO..... | |
| 64 |DO..... | |
| 65 | Indeterminate Beams | |
| 66 |DO..... | |
| 67 |DO..... | |
| 68 |DO..... | |

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| 69 |DO..... | |
| 70 |DO..... | |
| 71 | Trusses and Frames | |
| 72 |DO..... | |
| 73 |DO..... | |
| 74 |DO..... | |
| 75 |DO..... | |

Signature of the Faculty

Signature of the H.O.D