Govt. Polytechnic Dhangar (Fatehabad)

Lesson Plan (Even Semester)

| Name of the Faculty | Mr. Vijay Pal Sihag |
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| Discipline | Civil Engg. |
| Semester | 6th |
| Subject | Earthquake Resistant Building Construction |
| Lesson Plan Duration | 15 weeks (from January, 2024 to April, 2024) |

**Work load (Lecture / Practical) per week(in hours): Lectures-03, practicals -Nil

| eek | | Theory |
|------|-------------|---|
| | Lecture day | Topic (Including assignment / test) |
| 1st | 1st | Chapter 1. Elements of Engineering Seismology |
| | 2nd | Earthquake size (magnitude and intensity), Epicentre, Seismograph |
| | 3rd | Seismic waves, earthquake size (magnitude and intensity) |
| 2nd | 4th | Epicentre, Seismograph |
| | 5th | Classification of earthquakes, Seismic zoning map of India |
| | 6th | Static and DynamicLoading, Fundamental period. |
| 3rd | 7th | Revision |
| | 8th | Chapter 2.Seismic Behaviour of Traditionally- |
| | 9th | Performance of building during earthquakes |
| 4th | 10th | Mode of failure |
| | 11th | Out-of-plane failure, in-plane failure, Diaphragm failure |
| | 12th | Connection failure, Non-structural |
| 5th | 13th | Revision Assignment No.1 |
| | 14th | Sessional Test No.1 |
| | 15th | Chapter 3.Special construction method |
| 6th | 16th | Precautions to be observed while planning |
| | 17th | Designing of earthquake resistant building |
| | 18th | Construction of earthquake resistant building |
| 7th | 19th | Revision |
| | 20th | Chapter 4. IS Codes |
| | 21st | IS Codes: 4326 |
| 8th | 22nd | IS: 13828 |
| | 23rd | IS: 1893(Part 1) |
| | 24th | IS: 154326 |
| 9th | 25th | IS: 13920 |
| | 26th | Revision Assignment No.2 |
| | 27th | Sessional Test No.2 |
| 10th | 28th | Chapter 5. Seismic Provision of Strengthening |
| | 29th | Brick and RCC Structures |
| | 30th | Seismic Provision of RCC Structures |
| 11th | 31st | Revision |
| | 32nd | Chapter 6: Provision of reinforcement detailing |
| | 33rd | Reinforcement detailing in RC constructions |
| 12th | 34th | Detailing in masonry |
| | 35th | RC constructions |
| | 36th | Chapter 7. Disaster Management |
| 13th | 37th | Rescue workers |
| | 38th | Rescue plan, rescue by steps |
| | 39th | Rescue equipment |
| 14th | 40th | Safety in rescue operations |
| | 41st | Debris clearance |
| | 42nd | Casuality management. |
| 15th | 43rd | Revision Assignment No.3 |
| | 44th | Revision |
| | 45th | Sessional Test No.3 |