

UNIT – IV

Hazard Analysis: Training of personnel, information management, Emergency facilities and equipment necessary public awareness creation,

UNIT – V

Preparation and execution of the emergency management programme.

TEXT BOOKS

1.H.K.Guptha, “*Disaster management*”, 2nd Edition, University Press, 2001.

REFERENCES

1. S.Seetharaman, “*Construction Engineering and Management*”, 4th Edition, Umesh publications, New Delhi, 1999
- 2.Gupta, M.C., “*Manuals on Natural Disaster management in India*”, National Centre for Disaster Management, IIPA, New Delhi, 2002

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GVPCE(A)

M.Tech. Structural Engineering

2014

COMPUTER APPLICATIONS IN STRUCTURAL ENGINEERING LAB

Course Code: 13CE 2217

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Course Outcomes:

At the end of the course, the student will be able to:

- CO1 : Analyse and interpret the internal forces in 2D and 3D frames, using software
- CO2 : Design of trusses using software
- CO3 : Analyse and design simple bridge decks using software.
- CO4 : Calculate the fundamental frequency and mode shapes of a given structure.
- CO5 : Analyse the internal forces in beams and truss elements using software.

1. Introduction to STAAD Pro software or equivalent.
2. Analysis of continuous beam subjected to different types of loading.
3. Analysis of 2-D building frame for gravity loads.
4. Analysis of 3D frame for gravity loads

5. Earthquake analysis of 3D frames.
6. Wind analysis of 3D frames.
7. Analysis and design of simple bridge deck.
8. Modal Analysis of Buildings and calculating natural frequency.
9. Calculation of mode shapes of R.C. Building.
10. Introduction to ANSYS software.
11. Analysis of beams using ANSYS software.
12. Analysis of trusses using ANSYS software.