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GVPCE(A)	M.Tech. Structural Engineering	20	14
DISASTER MANAGEMENT			
(Elective –II)			
Course Code: 13CE2216	L	P	С
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### **Course Outcomes**:

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

- CO1: Analyse the natural calamities and manmade disasters.
- CO2: Understand the relief expenditures and legal aspects
- CO3: Operate risk and administrative management
- CO4: Assess the risk management and necessary equipment required.
- CO5: Prepare and execute the emergency management programme.

## UNIT – I

**Disasters** – Nature and extent of disasters, natural calamities such as earthquake, floods, drought, volcanoes, forest fires, hazards along the coasts landslides etc.

Manmade disasters such as chemical and industrial hazards, nuclear hazards, fire hazards etc.

### UNIT – II

**Disaster Management** : Relief measures Financing relief expenditure, legal aspects, rescue operations.

### UNIT – III

**Casuality** : management, risk management, emergency management programme – Administrative setup and Organization.

 $\mathbf{UNIT} - \mathbf{IV}$ 

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", 2<sup>nd</sup> Edition, University Press, 2001.

## REFERENCES

- 1. S.Seetharaman, "Construction Engineering and Management", 4<sup>th</sup> 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

## **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

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