# GUJARAT TECHNOLOGICAL UNIVERSITY Syllabus for B. Arch EIGHTH SEMESTER

# **SUBJECT NAME** – **DISASTER MANAGEMENT**

**SUBJECT CODE – 1085013** 

### **FOCUS:**

Understanding the Concepts and definitions of Disaster, Hazard, Vulnerability, Risk, Capacity – Disaster and Development, and disaster management

#### **CONTENTS:**

**Disaster Management Cycle and Framework** - Disaster Management Cycle – Paradigm Shift in Disaster Management Pre-Disaster – Risk Assessment and Analysis, Risk Mapping, zonation and Micro zonation, Prevention and Mitigation of Disasters, Early Warning System; Preparedness, Capacity Development; Awareness During Disaster – Evacuation Disaster Communication – Search and Rescue – Emergency Operation Centre – Incident Command System – Relief and Rehabilitation – Post-disaster – Damage and Needs Assessment, Restoration of Critical Infrastructure – Early Recovery – Reconstruction and Redevelopment; IDNDR, Yokohama Strategy, Hyogo Framework of Action

**Disaster Management in India** Disaster Profile of India – Mega Disasters of India and Lessons Learnt Disaster Management Act 2005 – Institutional and Financial Mechanism National Policy on Disaster Management, National Guidelines and Plans on Disaster Management; Role of Government (local, state and national), Non-Government and Inter-Governmental Agencies

Applications of Science and Technology for Disaster Management & Mitigation Geoinformatics in Disaster Management (RS, GIS, GPS and RS) Disaster Communication System (Early Warning and Its Dissemination)

# **SUGGESTED BOOKS**

- 1 Coppola D P, 2007. Introduction to International Disaster Management, Elsevier Science (B/H), London.
- 2. Manual on natural disaster management in India, M C Gupta, NIDM, New Delhi
- 3. An overview on natural & man-made disasters and their reduction, R K Bhandani, CSIR, New Delhi
- 4. World Disasters Report, 2009. International Federation of Red Cross and Red Crescent, Switzerland
- 5. Encyclopedia of disaster management, Vol I, II and IIIL Disaster management policy and

- administration, S L Goyal, Deep & Deep, New Delhi, 2006
- 6. Encyclopedia of Disasters Environmental Catastrophes and Human Tragedies, Vol. 1 & 2,Angus M. Gunn, Greenwood Press, 2008
- Disasters in India Studies of grim reality, Anu Kapur & others, 2005, 283 pages, Rawat Publishers, Jaipur
- 8. Management of Natural Disasters in developing countries, H.N. Srivastava & G.D. Gupta, Daya Publishers, Delhi, 2006, 201 pages
- 9. Natural Disasters, David Alexander, Kluwer Academic London, 1999, 632 pages
- 10 Disaster Management Act 2005, Publisher by Govt. of India