PANJAB UNIVERSITY CHANDIGARH

(Estted. under the Panjab University Act VII of 1947-enacted by the Govt. of India)

FACULTY OF ARTS

SYLLABI

FOR

DISASTER MANAGEMENT
(ADD-ON COURSE)
CERTIFICATE AND DIPLOMA COURSE
EXAMINATION, 2013

PANJAB UNIVERSITY, CHANDIGARH

Pedagogy:
Focus should be on observation, assessment and careful analysis of hazard prone areas to comprehend their vulnerability to disasters.

Note:

a) There shall be one compulsory question containing 15 short type questions covering the whole syllabus. The student shall attempt any ten parts in about 25-30 words each. Each part shall carry 1.5 marks (15 marks).

b) The whole syllabus shall be divided into 4 units. Eight questions will be set from the whole syllabus, two from each unit. The student will be required to attempt one question from each unit. Each question will carry 15 marks. This will be in addition to the compulsory question.

Practical:

1. A Visit to a school for vulnerability assessment.
2. A Visit to any Government Hospital to know their disaster management plan
3. A visit to one slum area in the City to assess and analyze risk.

Note:

1. Based on these visits, students 1.

CCDM II: Disasters in India

Maximum Marks	: 100
Theory Paper	: 75
Practical	: 25
Time	: 3 hrs.

Objectives: To introduce the students about the various disasters that have occurred in the recent past and their management in India.

Unit-I

- Regional Profile of India based on Earthquakes, Droughts, Floods and Cyclones.

Unit-II

- Disaster Management Frame in India
- National Level, including National Disaster Management Authority.
- State Authorities, Local Groups and Committees

Unit-III

- Case Studies: Bhopal Gas Tragedy, 1984; Orissa Super Cyclone, 1999; Kashmir Earthquake, 2005, and Kosi River Flood, 2009

Unit-IV

- Role of NGOs, Charitable Trusts, Army and Police, and Educational Institutions in Disaster Management

Pedagogy:

Visuals and DVDs on various disasters in India shall be shown to students.

Note:

a) There shall be one compulsory question containing 15 short type questions covering the whole syllabus. The student shall attempt any ten parts in about 25-30 words each. Each part shall carry 1.5 marks (15 marks).

b) The whole syllabus shall be divided into 4 units. Eight questions will be set from the whole syllabus, two from each unit. The student will be required to attempt one question from each unit. Each question

DIPLOMA COURSE

Course Structure:

Course Code	Title of the Paper	Max. Marks
DCDM I	Remote Sensing in Disaster Management Theory : 75 Practical : 25	100
DCDM II	GIS in Disaster Management Theory : 75 Practical : 25	100

DCDM-I: Remote Sensing in Disaster Management

Maximum Marks : 100
Theory Paper : 75
Practical : 25
. Time : 3 hrs.

Objectives:

Pedagogy:

Basic Fundamentals of Remote Sensing and GPS to be introduced by Arial photograph interpretation. Training in all aspects of GIS & Remote Sensing and its real world applications.

Note:

a) There shall be one compulsory question containing 15 short type questions covering the whole syllabus. The student shall attempt any ten parts in about 25-30 words each. Each part shall carry 1.5 marks (15 marks).

b) The whole syllabus shall be divided into 4 units. Eight questions will be set from the whole syllabus, two from each unit. The student will be required to attempt FOUR questions selecting one from each unit. Each question will carry 15 marks. This will be in addition to the compulsory question.

Practical :

Field Trips (one week practical attachment programme visit to Emergency sites, man-made and natural hazard locations)
To visit the sites of previous or current disaster as well as as agencies dealing with disasters or disaster prone areas/districts in various ways.

Note:

a) Based on these visits, students should prepare a report.
b) The report should be submitted two weeks before the exam. The report will be evaluated by a Board of Examiners consisting of the teacher teaching the course a

7. Remote sensing and GIS technologies for monitoring and prediction of disasters: Shailesh Nayak, Siyka Zlatanova, Springer A1Books.co.in Rediff Books Flipkart Infibeam.-2008.

8. Role of Remote Sensing in Disaster Management: Nirupama, Slobodan P. Simonovic,

Pedagogy:

Basic Fundamentals of GIS to introduce Disaster Management.

Note:

a) There shall be one compulsory question containing 15 short type questions covering the whole syllabus. The student shall attempt any ten parts in about 25-30 words each. Each part shall carry 1.5 marks (15 marks).

b) The whole syllabus shall be divided into 4 units. Eight questions will be set from the whole syllabus, two from each unit. The student will be required to attempt FOUR questions selecting one from each unit. Each question will carry 15 marks. This will be in addition to the compulsory question.

Practical

Practical Disaster Exercises and online activities.

Note:

a) Based on these visits, students should prepare a report.
b) The report should be submitted two weeks before the exam. The report will be evaluated by a Board of Examiners consisting of the teacher teaching the course and one faculty member from the allied discipline.

Essential Readings:-

1. Introduction to Geographical Information System: Dr. M.A.Siddiqui, Sharda Pustak Bhawan Allahabad.-2005.

2. Integration of GIS and Remote Sensing: Victor Mesev, John Wiley and Sons Ltd.-2007.

3. GIS- Fundamentals, Applications and Implementations: Dr. K. Elangovan, New India Publishing Agency- Pitampura- New Delhi.-2006.

4. Introduction to Geographical Information System: Lan Heywood, Sarah

8. Geo-information for disaster management: By Petrus Johannes Maria van Oosterom, Siyka Zlatanova, Elfriede M. Fendel, Springer A1Books.co.in Rediff Books Flipkart Infibeam-2005.

9. GIS for disaster management: proceedings: Hadeki Kaji, United nations centre for regional development, 1997.

10. Disaster damage estimation models: Data needs vs. ground reality: By Sudha Maheshwari, Rutgers The State University of New Jersey - New Brunswick-2007.

11. Frontiers of geographic information technology: Sanjay Rana, Jayant Sharma, Birkhäuser, 2006 - Science.

12. "Concepts and Techniques of Geographic Information Systems": C.P.Lo and Albert K.W.Yeung 2005 Prentice Hall of India, New Delhi.

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