

PANJAB UNIVERSITY CHANDIGARH

PANJAB UNIVERSITY, CHANDIGARH

Outlines of tests, syllabi and courses of reading for Disaster Management (Add-on Course) for the examinations of 2015.

CERTIFICATE COURSE

Course Structure

Course Code	Title of the Paper	Max. Marks
CCDM I	Fundamentals of Disaster Management Theory : 75 Practical : 25	100
CCDM II	Disasters in India Theory : 75 Practical : 25	100

CCDM I: Fundamentals of Disaster Management

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

Objectives:

To introduce the students about basic concepts of various types of disasters and educate them on basic disaster management strategies.

Unit-I

- Definition and Concept of Hazard, Risk, Vulnerability and Disaster
- Types and classification of Disasters

Unit-II

- Nature Induced Disasters:
Earthquakes, Floods and Cyclones.
Avalanches, Forest Fire and Tsunami.

Unit-III

- Human Induced Disasters:
Nuclear, Chemical and Industrial Disasters
Global warming; Biological Disasters; Epidemics

- Essentials of Disaster Management; Institutional and Individual's responsibilities

Note: The Field Work based report of 25-30 pages prepared by the students will be submitted two weeks before the theory examination. This will be evaluated by a Board of Examiners consisting of the teacher teaching the course and one faculty member from the allied discipline.

List of Readings:

Essential Readings

1. Kapur, A.: *Disasters in India: Studies of Grim Reality*, Rawat Publications, Jaipur; 2005.
2. Paraswamam, S. and Umikrishnan, P.V., *India Disaster Report*, Oxford University Press, New Delhi, 2000.
3. Reddy, K.R and Others (eds): *Natural Hazards and Disasters*, Department of Geography, Sri Krishnadeveraya University, Anantapur, A.P., India, 2009.

Further Readings:

1. Sharma, V.K. (ed.): *Disaster Management*, Indian Institute of Public Administration, New Delhi, 1994.
2. Bryant Edwards: *Natural Hazards*, Cambridge University Press, U.K, 2005.

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:

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2. Nirupama, Slobodan P. Simonovic: *Role of Remote Sensing in Disaster Management*, University of Western Ontario. Dept. of Civil and Environmental Engineering.-2002.
3. Warner, T.A., M. D. Nellis and G. M. Foody: *The SAGE Handbook of Remote Sensing*, SAGE Publication Ltd., London, 2009.
4. Jonathan Li, S. Zlatanova and A. Fabbri (eds.): *Geomatics Solutions for Disaster Management*, Springer, Verlag, Berlin, Heidelberg, 2007.

DCDM-II: GIS in Disaster Management

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

Objectives: To introduce the students about the basic concepts and application on

- 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.

List of Readings

Essential Readings:-

1. Dr. M.A.Siddiqui : *Introduction to Geographical Information System*, Sharda Pustak Bhawan Allahabad.-2005.
2. Victor Mesev : *Integration of GIS and Remote Sensing*, John Wiley and Sons Ltd.-2007.
3. Dr. K. Elangovan : *GIS- Fundamentals, Applications and Implementations*, New India Publishing Agency- Pitampura- New Delhi.-2006.
4. Lan Heywood, Sarah Cornelius, Steve Carver, Srinivasa Raju: *Introduction to Geographical Information System*, Dorling Kindersley India Pvt. Ltd.2006.
5. Kang Tsung Chang : *Introduction to Geographic Information Systems*, Tata Mc Graw-Hill, Publishing Company Ltd.- New Delhi.2006.
6. Greg Bankoff Frerks, Dorothea Hilhorst: *Mapping Vulnerability: Disaster Development and People*, Earthscan Publications Ltd., 2004.
7. Monmonier Mark: *Cartographies of Danger: Mapping Hazards in America*, University of Chicago Press, 1989.

Note:

a)

ADCDM -VI: Project Report Based on Field Work.

Maximum Marks : 100

- Paper ADCDM-II will be based on Project Report
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