

**BHARATHIAR UNIVERSITY, COIMBATORE.**  
**M. Sc. APPLIED GEOGRAPHY (Affiliated Colleges)**  
**(Effective from the academic Year 2010-2011)**  
**SCHEME OF EXAMINATIONS – CBCS PATTERN**

| Sem. | Study Components | Course title  | Ins. hrs/<br>week | Examinations |     |       | Credit |             |
|------|------------------|---|-------------------|--------------|-----|-------|--------|-------------|
|      |                  |   |                   | Dur.Hrs.     | CIA | Marks |        | Total Marks |
| I    | Paper I          | Principles of Geomorphology   | 6                 | 3            | 25  | 75    | 100    | 4           |
|      | Paper II         | Theoretical and Applied Geomorphology                               | 6                 | 3            | 25  | 75    | 100    | 4           |
|      | Paper III        | Geography of India  | 6                 | 3            | 25  | 75    | 100    | 4           |
|      | Paper IV         | Advanced Cartography  | 6                 | 3            | 25  | 75    | 100    | 4           |
|      | Elective         | Paper I Remote sensing and its applications in Geography            | 6                 | 3            | 25  | 75    | 100    | 4           |
| II   | Paper V          | Applied Climatology   | 5                 | 3            | 25  | 75    | 100    | 4           |
|      | Paper VI         | Environmental Studies And Management                                | 5                 | 3            | 25  | 75    | 100    | 4           |
|      | Paper VII        | Geographical Thought  | 5                 | 3            | 25  | 75    | 100    | 4           |
|      | Practical I      | Techniques Of Terrain Mapping                                       | 5                 | 3            | 40  | 60    | 100    | 4           |
|      | Practical II     | Mapping Of Quantitative and Qualitative Data                        | 5                 | 3            | 40  | 60    | 100    | 4           |
|      | Elective         | Paper II Digital Image Processing                                   | 5                 | 3            | 25  | 75    | 100    | 4           |
| III  | Paper VIII       | Computer Application in Geography and Geographic Information System | 6                 | 3            | 25  | 75    | 100    | 4           |
|      | Paper IX         | Urban Geography   | 6                 | 3            | 25  | 75    | 100    | 4           |
|      | Paper X          | Agricultural Geography  | 6                 | 3            | 25  | 75    | 100    | 4           |
|      | Paper XI         | Geography of Population   | 6                 | 3            | 25  | 75    | 100    | 4           |
|      | Elective         | Paper III-GIS and GPS   | 6                 | 3            | 25  | 75    | 100    | 4           |
| IV   | Paper XII        | Quantitative Techniques   | 6                 | 3            | 25  | 75    | 100    | 4           |
|      | Paper XIII       | Disasters Mitigation and Management                                 | 6                 | 3            | 25  | 75    | 100    | 4           |
|      | Paper XIV        | Regional Planning and Development                                   | 6                 | 3            | 25  | 75    | 100    | 4           |
|      | Practical III    | Methods of Data Analysis  | 6                 | 3            | 40  | 60    | 100    | 4           |
|      | Project          | Project Work  | -                 | -            | -   | -     | 150*   | 6           |
|      | Elective         | Practical in Geo-informatics  | 6                 | 3            | 40  | 60    | 100    | 4           |
|      |                  | Total   |                   |              |     |       | 2250   | 90          |

\* Project report -120 marks; Viva-voce – 30 marks.

**Guidelines for Project Report :**

Phase I - Presentation of the project proposal with the aims, objectives, hypothesis, methodology, study area and chapterisation. This has to be presented which carries 40 marks.

Phase II – Includes Data source, Collections, Techniques to be adopted etc. to be presented carries 40 marks.

Phase III – Presentation of final report carrying 40 marks.

**Note :**

1. The Syllabus for the above papers (Except Core paper XIII - Disasters Mitigation and Management & Elective Paper I - Remote sensing and its applications in Geography) be the same as prescribed for the academic year 2007- 08. The existing Diploma papers are renamed as Elective papers.
2. The syllabus for the Core paper XIII - Disasters Mitigation and Management & Elective Paper I - Remote sensing and its applications in Geography are furnished below:

**Core paper XIII - Disasters Mitigation and Management**

**Unit II**

Disasters – Meaning and Types – Needs for study – Disasters Management.

**UNIT II**

Impact of Earthquake – Tsunamis and Volcanoes and their Management.

**UNIT III**

Impact of Storms, floods and Mass Movements and Management.

**UNIT IV**

Impact of Drought and Famine and Forest Fire – Management.

**UNIT V**

Impact of Man-made disasters and their management.

**RECORD.**

**BOOKS FOR REFERENCE :**

1. Natural Disasters by Partick L. Abbott., WCB WM.C. Brown Publishers.
2. The Changing Earth-Exploring Geology & Evolution by James S.Monore & Reed Wicander BROOKS / COLE.
3. Natural Disasters : A guide for Relief Workers (1980) JAC Adhyatma Sadhana Kendra, Mehruali, New Delhi – 110 030.
4. Disaster Planning : The Preservation of Life and Property, Harold D.Faster (1980) Springer Verlag, New York.
5. Disasters Management, Shailendra K. Singh, Subash C.Kundu & Shobu Singh (1998) Mittal Publications, New Deldhi.
6. Natural Disaster Reduction, Girish K. MIshra & Mathur. G.C. (1993), Reliance Publishing House, New Delhi.
7. Disaster Preparedness in India, Narendra Kumar Jain, Adhyatma Sadhana Kendra, Mehruali, New Delhi.
8. UN Manual on Disaster Management.
9. [www.gisdevelopment.net](http://www.gisdevelopment.net)

**Elective Paper I : Remote sensing and its applications in Geography**

1. Over view of Remote Sensing and Remote Sensing Systems – EMR and its characteristics – Interaction of EMR with atmosphere and earth features – atmospheric windows – types of remote sensing – platforms – sensors – errors and corrections – Ground Truth Verification.
2. Aerial Remote Sensing : History – Aerial cameras – films – photographs - elements of photographs: marginal information and scale – measurement of scale - stereo model – relief displacement – measurement of height – elements of photo interpretation .
3. Remote sensing satellites – LANDSAT – SPOT – ERS – JRS – IKONOS – QUICK BIRD – orbiting characteristics – resolution and sensor characteristics – other remote sensing satellites.
4. Indian Remote Sensing satellites – resolution and scanning characteristics - Satellite data products.
5. Applications of Remote Sensing in Geography: Geomorphology – Land use / Land cover agriculture – water resources – urban planning – environmental assessment.

**REFERENCES:**

American Society of Photogrammetry, (1982) : **Manual of Photogrammetry**, IV Edition.

Anji Reddy, M., (2001) : **Remote Sensing and Geographical Information System**, BS Publications, Hyderabad.

Avery T.E., and G.L. Berlin, (1992) : **Fundamentals of Remote Sensing and Air Photo Interpretation**, V Edition, Macmillan, New York.

Joseph, George., (2003) : **Fundamentals of Remote Sensing**, Universities Press, Hyderabad.

Lillesand, T.M., (1994) : **Remote Sensing and Image Interpretation**, John Wiley and Sons, New York.