

**BHARATHIAR UNIVERSITY, COIMBATORE.**  
**M. Sc. APPLIED GEOGRAPHY (Affiliated Colleges)**  
**(Effective from the academic Year 2014-2015)**  
**SCHEME OF EXAMINATIONS – CBCS PATTERN**

Sem.	Study Components	Course title	Ins. hrs/ week	Examinations				Credit
				Dur.Hrs.	CIA	Marks	Total Marks	
I	Paper I	<b>Geomorphology</b>	6	3	25	75	100	4
	Paper II	<b>OCEANOGRAPHY</b>	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 Applications in Geography	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 :

**The syllabus for the above papers (except Paper I Geomorphology and Paper II Oceanography) be the same as prescribed for the academic year 2012-13.**

The syllabus for the Paper I Geomorphology and Paper II Oceanography are furnished below.

**SEMESTER I**  
**CORE PAPER I**  
**GEOMORPHOLOGY**

**UNIT I**

Geomorphology – definition – scope – nature and content – development – recent trends.  
Basic concepts in Geomorphology – geological time scale.

**UNIT II**

Origin of the earth – internal structure of the earth – rocks – types; igneous – sedimentary and metamorphic. Continental drift – Sea floor spreading- Plate tectonics – seismic and volcanic zones

**UNIT III**

Geomorphic process – endogenic – diastrophism – folds – faults – earthquake – volcanism. Exogenic process – Weathering – mass wasting – soils.

**UNIT IV**

Gradational process – Erosional and depositional landforms of fluvial – glacial – Aeolian – Coastal – Karst.

Landforms evolution: fluvial cycle, arid cycle

**UNIT V**

Climate and landforms – effect of climate on land forms – morphogenetic regions – ice ages.

Applied Geomorphology – Application of Geomorphology in Mineral exploration – Hydrology – Land use and Regional planning.

***REFERENCE:***

1. Thorn bury W.D.(1969) Principles of Geomorphology. John Wiley and sons New York.
2. Strahler., A.N. &Strahler A.H. (1984) Elements of Physical Geography. John & Wiley
3. Small. R.J. (1975) The study of Landforms. Cambridge University Press Cambridge.
4. Savindra Singh (2002) Geomorphology, Kalyan Publications, New Delhi.

## **CORE PAPER II**

### **OCEANOGRAPHY**

#### UNIT I

Nature and scope of oceanography—History of oceanography; distribution of land and water; major features of ocean basins; continental margin and deep-ocean basins

#### UNIT II

Physical and chemical properties of sea water; Interlink between atmospheric circulation and circulation patterns in the oceans; Surface currents; thermohaline, waves and tides.

#### UNIT III

Marine biological environment : bio—geochemical cycles in the ocean, biozones, types of Organisms: Plankton, Nekton and Benthos, food and mineral resources of the sea.

#### UNIT - IV

Major Marine Environments: Coastal,,: estuaries, deltas, barrier Island, rocky coasts, reefs-formation of coral reefs

Open: continental-shelf, continental - slope and deep, pelagic environment and floor of the ocean basins.

#### UNIT - V

Impact of Humans on the Marine Environment. Law of the Sea; exclusive economic zone,deep sea marine deposits

#### REFERENCES:

1. Davis.Richard J.A. 1986: "Oceanography - An Introduction to the Marine Environment". Wm. C. Brown Iowa.
2. Duxbury, C.A and Duxbury B. 2nd ed. 1996. : An Introduction to the world's Oceans - C.Brown. Iowa Curriculum Development Committee in Geography 91
3. Gross, M.Grant, 1987: Oceanography, a View of the earth , Prentice - Hall Inc. New Jersy.
5. King, C.A.M. 1962. Oceanography for Geographers
6. Sharma, R.C. 1985." The Oceans "N.Delhi.