

~~SEM-I~~

**2010**

**M.Sc**

**1st Semester Examination**

**GEOGRAPHY AND E.M.**

**PAPER—GEO-101**

*Full Marks : 40*

*Time : 2 Hours*

*The figures in the right-hand margin indicate full marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

**Write the answers of each Unit in separate books.**

**Unit—I**

**(Geotectonics)**

[Marks : 20]

**Group—A**

1. Answer any one question : 1×8
- (a) Explain the origin of earth's magnetic field and what is the role of paleomagnetism in construction of paleomagnetic polar wandering curves for the earth ? 8
- (b) Identify the major tectonic landforms of arc-trench system and Accretionary prism with special reference to the formation of Andaman Nicobar Islands and Andaman Trench. 8

**Group—B**

2. Answer any *two* questions : 2
- (a) Narrate the vies of Stephen W. Hawking on BI Holes.
  - (b) Explain the tectonic set up of Andes Mountain wit the Circum-Pacific system.
  - (c) Identify the Internal zones of the earth, tl subdivisions, composition and dynamics as eviden by the study of seismic waves.
  - (d) Discuss the tectonic landforms of MOR.

**Group—C**

3. Answer any *two* questions : 2
- (a) What is Big Bang?
  - (b) Define sedimentary basin.
  - (c) What is Transform Fault?
  - (d) What do you understand by sea-floor spreading
-

**Unit—II**  
**(Theoretical Geomorphology)**

[Marks : 20]

**Group—A**

1. Answer any *one* question : 1×8
- (a) Enumerate the elements of slope and discuss the mechanism for development of wasing and waning slopes. 8
- (b) Explain how a profile of equilibrium can develop in a fluvial system with reference to its controlling parameters.

**Group—B**

2. Answer any *two* questions : 2×4
- (a) Establish the linkage between temporal and functional approaches to landform study. 4
- (b) Explain the role of chemical processes in landform evolution. 4
- (c) Assess the role of weathering for reducing shear strength of materials. 4
- (d) What are the principal mechanisms of base level change? 4

**Group—C**

- 3.** Answer any two questions : 2×2
- (a) Define the concept of 'Complex response'. 2
- (b) What is the practical applicability of shear stress measurement in rocks? 2
- (c) What is 'Geomorphic Stress'? 2
- (d) What are the chief slope elements in parallel retreat model? 2
-