

**2018**

**M.A. / M.Sc. 1st Seme. Examination**

**GEOGRAPHY**

**PAPER—GEO-101**

*Full Marks : 40*

*Time : 2 Hours*

*The figures in the margin indicate full marks.*

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

*Illustrate the answers wherever necessary.*

**Unit—101.1**

*Geotectonics*

**[Marks : 20]**

**1. Answer any one question :**

**1×8**

- (a) Discuss the process of volcanism with application of plate tectonic theory in reference to Island Arc set up.

*(Turn Over)*

- (b) Identify and explain the origin and evolution of solar system with special reference to the Earth and Moon.

2. Answer any *two* questions :

2×4

- (a) What are the worldwide evidences of Neo-tectonics ?
- (b) Explain the concept of geomagnetic polarity reversal.
- (c) Briefly explain the origin of earth's magnetic field.
- (d) Write a short note on Himalayan orogenesis with application of plate tectonic theory.

3. Answer any *two* questions :

2×2

- (a) What is absolute dating technique ?
  - (b) Define shallow earthquake.
  - (c) What is paleomagnetism ?
  - (d) Define 'Hot spot' in plate tectonics.
-

**Unit—101.2****Geomorphology****[Marks : 20]****Group-A****1. Answer any one question : 1×8**

- (a) Illustrate the development of landforms resulting from weathering.
- (b) Elucidate how process-form relationship varies on different slope units.

**Group-B****2. Answer any two questions : 2×4**

- (a) Make a comparative assessment of the principles of uniformitarianism and catastrophism with suitable examples.
- (b) Discuss the properties of a graded profile.
- (c) Elucidate the mechanism of slope replacement for the cross profile of an eroding river following Penck's concept.

- (d) Identify the possible areas of application of geomorphology in flood management.

**Group-C**

3. Answer any two questions :

2×2

- (a) Define relaxation time with example.
  - (b) Define cascade system with illustration.
  - (c) What do you mean by safety factor ?
  - (d) What is geomorphic threshold ? Give example.
-