# MA/M.Sc. 1st Semester Examination, 2019 GEOGRAPHY

PAPER - GEO-(UNIT-101.1 & 2)

Full Marks: 40

Time: 2 hours

The figures in the right-hand margin indicate marks

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

Illustrate the answers wherever necessary

Write the answers to Questions of each Units in separate books

UNIT - 101.1

(Geotectonics)

[ Marks : 20 ]

GROUP - A

1. Answer any one question:

 $8 \times 1$ 

(a) Describe the process of the formation planetary disc around the Sun, and explain the formation at the earth. (b) How does the Apparent Polar Wandering path (APW) help in conceptualizing the continental drift theory?

### GROUP - B

## 2. Answer any two questions:

 $4 \times 2$ 

- (a) What is the basic principle of radiometric age determination technique?
- (b) How do the thermo remoment (TRM) and postdepersional remoment magnetism (pDRM) help us to study the paleo magnetism of the Earth's crust?
- (c) Briefly discuss the characteristics of neotectonic movements.
- (d) What are the differences between orogenesis and epeirogenesis.

#### GROUP - C

3. Answer any two questions:

 $2 \times 2$ 

(a) What are the fundamental subatomic particles?

- (b) Which process powers the Sun?
- (c) What quantum property at the subatomic particles is responsible for the genesis of magnetic behaviour inside substances?
- (d) What is a 'back arc basin'?

UNIT - 101.2

( Geomorphology )

[ Marks : 20 ]

GROUP - A

4. Answer any one question:

- $8 \times 1$
- (a) Elucidate the theories on flood-plain development.
- (b) Explain different concepts of equilibrium and their applications in geomorphology.

GROUP - B

- 5. Answer any two questions:
- $4 \times 2$
- (a) Briefly explain the importance of functional approach in process study.

- (b) How does the slope replacement work?
- (c) How does geomorphic stress help in weathering?
- (d) What are the characteristics of an asymmetric channel?

## GROUP - C

6. Answer any two questions:

 $2 \times 2$ 

- (a) What is active base level?
- (b) What is angle of repose?
- (c) Define graded state.
- (d) Define the term 'complex response'.