2 SEM TDC GEO M 1

2014

(May)

GEOLOGY

(Major)

Course: 201

(Principles of Stratigraphy and Indian Stratigraphy)

> Full Marks: 80 Pass Marks: 32

Time: 3 hours

The figures in the margin indicate full marks for the questions

UNIT-2.1

(Principles of Stratigraphy)

(Marks : 30)

1. Choose the correct one :

 $1 \times 3 = 3$

(a) Principles of uniformitarianism which states 'present is the key to the past' was postulated by Smith / Hutton / Grabau / Dana.

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(Turn Over)

- (b) A body of rock characterised by lithologic homogeneity is called supergroup / group / formation / bed.
- (c) System / series / epoch / stage is not a time rock unit.
- 2. Write the geological time scale mentioning the appropriate durations of each time unit.

Or

Briefly discuss the modern stratigraphic classification mentioning its advantages over the older classification.

- 3. Write short notes on any two of the following: 3×2=6
 - (a) Biostratigraphy
 - (b) Stratigraphic correlation
 - (c) Time-rock unit
- 4. What do you mean by paleogeography? Describe the paleogeographic reconstruction.

2+7=9

- 5. Write short note on any one of the following: 3
 - (a) Geochronologic units
 - (b) Radiometric dating of rocks

UNIT-2.2

(Indian Stratigraphy)

(Marks: 50)

- 6. Write notes on any two of the following: 3×2=6
 - (a) Major physiographic divisions of India
 - (b) Aravalli strike
 - (c) Burmese arc
- Write on the stratigraphy and lithology of the pre-Cambrian rocks of Assam and Meghalaya plateau. 6+4=10

Or

Write on the stratigraphic succession and lithologic description of Upper Vindhayan Group.

- g. Write about the stratigraphic succession of Gondwana rocks of India. Also give a brief idea about their structures and economic importances.
 6+4=10
- Describe the stratigraphy, lithology and paleontology of cretaceous of Trichinopoly. 4+3+3=10

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(Turn Over)

10. Write notes on (any three):

3×3=9

- (a) Bundelkhand gneissic complex
- (b) Classification and life of the Cenozoic era
- (c) Deccan trap
- (d) Saline series

11. Answer as directed:

 $1 \times 5 = 5$

(a) Nurpuh sandstone member is a subdivision of — Formation.

(Fill up the gap)

(b) The Erinpura granite is a — granite.

(Fill up the gap)

(c) The total thickness of Cuddapah Supergroup is —.

(Fill up the gap)

(d) Damodar / Barakar / Raniganj / Rajmahal Formation is richest in plant fossils.

(Choose the correct one)

(e) Bhuj Formation is the name given to — beds.

(Fill up the gap)
