

(4)

Ex./FG/1/XI/40/2017

15. Write the mechanism of Earth's earliest crust formation with schematic diagram. True komatiites are very rare and essentially restricted to rocks of Archean age—Justify. 3+2

16. Write short notes on (any **two**): 2.5x2=5
(a) Closepet Granite,
(b) Malani Igneous suite,
(c) Dalma Volcanics.

— X —

BACHELOR OF SCIENCE EXAMINATION, 2017

(Final Year, 6th Semester)

GEOLOGICAL SCIENCES

Paper : XI

Stratigraphy

Time : Two hours

Full Marks : 50

Use separate Answer scripts for each group.

GROUP - A (25 marks)

Answer **q.no.1** and any **four** questions from the rest.

All questions carry equal marks.

1. Match the following fossils with age

Fossils	Age
<i>Gondwanasauras bijoriensis</i>	Pliocene
<i>Joannites thanamensis</i>	Late Permian
<i>Belemnite alfuricus</i>	Lowermost Paleocene
<i>Hipparion theobaldi</i>	Mid Jurassic
<i>Guembelina cretacea</i>	Up Triassic

(Turn Over)

(2)

2. Discuss bipartite and tripartite subdivisions of the Gondwana Supergroup. 5
3. Write a short note on Permo-Triassic boundary within the Gondwana Supergroup. 5
4. Discuss about bathymetric variations of Cambrian sea across Spiti-Kashmir-Salt Range stretch. 5
5. Describe the palaeoenvironment of deposition during Jurassic rock of Spiti area and its lateral extent across other parts of extrapeninsular India. 5
6. Describe the palaeoenvironment of deposition during Mesozoic of Trichinopoly. 5
7. Cite the evidences of Cretaceous sea level rise from the cratonic part of peninsular India. 5
8. Write a short note on the stratigraphy of Siwalik Group. 5
9. Write a short account on the sedimentation history of Bengal Basin. 5

(3)

GROUP - B (25 marks)

(Precambrian Stratigraphy)

Answer any **five** questions.

10. Why is it difficult to reconstruct the geologic history in the Precambrian period? What are the reasons to assume that Earth's early atmosphere was most likely to have lost in the space? 3+2
11. What are the geological implications of the Eastern Ghat Mobile Belt (EGMB) in the content of crustal evolution. Discuss the different tectonic zones of the EGMB. 2+3
12. Write the names of the major crustal scale lineaments in the Aravalli-Delhi Fold Belt. What is the basis of divided the Delhi Fold Belt into North and South Delhi Fold Belts? 3+2
13. Discuss the tectonic evolution of the Bastar Craton. 5
14. Show the major crustal scale shear zones and major tectonic units of Southern Granulite Terrain. What is Fermor Line? 3+2

(Turn Over)