8. Write note on the following: 5+4+5=14

   i) Panjal Volcanics

   ii) Barakar Formation

   iii) Fossils of Kashmir valley from Paleozoic.

UNIT-V

9. Write note on stratigraphic succession, lithology, fossil content and environment of deposition of Eocene of Assam Basin. 2+4+4+4=14

Or

10. Write short note on the following:

   a) Ariyalur Group of Cretaceous of Trichinopally. 5

   b) Lameta Formation of Narmada basin 3

   c) Deccan Volcanic Provinces. 6

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PG (CBCS) ODD SEMESTER EXAMINATION, 2022
held in MARCH, 2023

EARTH SCIENCE

3rd Semester

COURSE NO. ESCCC - 301

(Principles of Stratigraphy and Indian Stratigraphy)

Full Marks : 70
Pass Marks : 28

Time : 3 hours

The figures in the margin indicate full marks for the questions

Answer any five questions, taking one from each unit

UNIT-I

1. a) What is stratigraphy? Write the difference between geochronological unit and chronostratigraphic unit. 1+3=4

   b) What is the significance of GSSP? 3

   c) What are the basic units of lithertratigraphy and biostratigraphy. $1^1/_2+1^1/_2=3$

(Turn Over)

d) What is the significance of cross-cutting relation in building lithostratigraphy? Describe with a neat sketch. 4

Or

2. a) Write a descriptive note on 'Unconformity' with neat sketch. 7

b) What are the different possibilities when a taxon is not observed in a section. What is taxon range zone. $5^1/_2+1^1/_2=7$

UNIT-II

3. a) What is correlative conformity? What is TST and HST. When in a sea level cycle the above two system tracts are going to be encountered? 1+3+3=7

b) Define downlap with neat sketch. Write a descriptive note on how accommodation space is created or destroyed with the interplay of tectonism and eustatic sea level change. 1+6=7

4. a) Write a note on pedostratigrapy and amino acid dating. 5+5=10

b) Define 'event stratigraphy' and 'chemo-stratigraphy'. 2+2=4

UNIT-III

5. a) Write short note on 'Singbhum Granite'. Write a note on tectonic model of Singbhum orogeny. 4+8=12

b) What is mobile belt? Enumerate different mobile belts of India. 1+1=2

Or

6. Write note on the following : 5+5+4=14

a) Khondalite zone of EGMB

b) Rewa group of Vindhyan

c) Erinpura Granite Suit.

UNIT-IV

7. a) Enumerate the basins of India where Paleozoic depositions are found. Why are they confined mostly in the northern boundary of India? 2+2=4

b) Write a note on the different formations found in Ordovician & Silurian of Spiti Valley. 10

(Turn Over)