

**4/EH-26 (iv) (Syllabus-2015)**

**2022**

**( May/June )**

**GEOLOGY**

**( Elective/Honours )**

**( Stratigraphy and Palaeontology )**

**( GELH-401 )**

**Marks : 56**

**Time : 3 hours**

*The figures in the margin indicate full marks  
for the questions*

**Answer four questions, selecting one from each Unit**

**GROUP—A**

**( Stratigraphy )**

**UNIT—I**

**1. (a) Describe the relationship between chronostratigraphic units and geochronologic units.**

**3**

**(b) Add a brief note on lithostratigraphic units.**

**4**

**(c) Discuss the principles of radiometric dating of rocks.**

**7**

2. (a) Give stratigraphical description of the Precambrian rocks of Cuddapah Supergroup. 8

- (b) Write short notes on any two of the following :  $3 \times 2 = 6$

- (i) Jaintia Group
- (ii) Singhbhum Granite
- (iii) Banded Gneissic Complex

#### UNIT-II

3. (a) Describe the stratigraphy of the tertiary rocks of North-East India. 10

- (b) Define trap rock. Write a note on Deccan Traps.  $1+3=4$

4. Write short stratigraphical notes on any four of the following :  $3\frac{1}{2} \times 4 = 14$

- (a) Muth Quartzites
- (b) Uttatur Formation
- (c) Succession of Siwalik Group
- (d) Patcham Formation
- (e) Bagh Bed
- (f) Upper Triassic succession of Spiti Valley

#### GROUP-B

#### ( Palaeontology )

#### UNIT-III

5. (a) What are the subdivisions of palaeontology? Discuss the different modes of preservation of fossils.  $2+5=7$

- (b) What are microfossils? Discuss the significance of microfossils.  $2+5=7$

6. (a) Mention the Siwalik mammals of India and discuss the causes of their extinction.  $4+6=10$

- (b) Outline the evolutionary trends of the hoofs of Equidae. 4

#### UNIT-IV

7. (a) Describe the morphological features of Pelecypoda with a labelled diagram.  $8+2=10$

- (b) Discuss the geological distribution of trilobites. 4

( 4 )

8. Write palaeontological notes on any two of  
the following :  $7 \times 2 = 14$

- (a) Gondwana Flora  
(b) Morphology of Graptoloidea  
(c) Foraminifera

★ ★ ★

Ques. 8. Write palaeontological notes on any two of the following :

(a) Gondwana Flora      (b) Morphology of Graptoloidea      (c) Foraminifera

Ques. 8. Write palaeontological notes on any two of the following :

(a) Gondwana Flora      (b) Morphology of Graptoloidea      (c) Foraminifera

Ques. 8. Write palaeontological notes on any two of the following :

(a) Gondwana Flora      (b) Morphology of Graptoloidea      (c) Foraminifera

Ques. 8. Write palaeontological notes on any two of the following :

(a) Gondwana Flora      (b) Morphology of Graptoloidea      (c) Foraminifera

Ques. 8. Write palaeontological notes on any two of the following :

(a) Gondwana Flora      (b) Morphology of Graptoloidea      (c) Foraminifera