

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

**2 0 2 3**

( 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) Define correlation. Mention the factors used in litho-stratigraphic and bio-stratigraphic correlation. 1+2=3
- (b) Define stratigraphy. Illustrate the different principles used in stratigraphical studies of rock. 1+6=7
- (c) Write a note on radiometric dating of rocks. 4

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2. (a) Give stratigraphical description of the pre-Cambrian rocks of Singhbhum supergroup. 8
- (b) Write short notes on any two of the following :  $3 \times 2 = 6$
- (i) Shillong Group
  - (ii) Cuddapah Supergroup
  - (iii) Closepet Granite

UNIT—II

3. (a) Describe the stratigraphical succession of the Jurassic rocks of Kutch region. 7
- (b) Write stratigraphical notes on any two of the following :  $3\frac{1}{2} \times 2 = 7$
- (i) Patcham Formation
  - (ii) Siwalik Group
  - (iii) Barail and Surma Groups
4. Write stratigraphical notes on any two of the following :  $7 \times 2 = 14$
- (a) Classification of Gondwana
  - (b) Cretaceous of Narmada Valley
  - (c) Mahadek Formation
  - (d) Tertiary Rocks of North-East India

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GROUP—B  
( Palaeontology )

UNIT—III

5. (a) Define micro-palaeontology. Explain the different types of microfossils with examples.  $2+5=7$
- (b) Write short notes on any two of the following :  $3\frac{1}{2} \times 2 = 7$
- (i) Index fossils
  - (ii) Uses of fossils
  - (iii) Causes of extinction of Siwalik mammals
  - (iv) Types of fossilization
6. Describe the evolutionary trends observed in trilobites with neat sketches.  $12+2=14$

UNIT—IV

7. (a) Give morphological description of Echinoidea with suitable sketches.  $7+1=8$
- (b) Write short notes on any two of the following :  $3 \times 2 = 6$
- (i) Suture lines in Cephalopoda
  - (ii) Articulata and Inarticulata
  - (iii) Vertebraria

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8. Write paleontological notes on any *two* of the following : 7×2=14

(a) Gondwana Flora

(b) Morphology of Gastropoda

(c) Morphology of Foraminifera

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