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

2017

(April)

**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 stratigraphy. Illustrate the principles used in stratigraphy. 1+5=6
  - (b) Mention the relationship exists between chrono-stratigraphic and geo-chronologic units with examples. 3+1=4

- (c) Add a brief note on biostratigraphic units.
- 2. (a) Give stratigraphical description of the Precambrian rocks of Karnataka.
  - (b) Write notes on any two of the following:  $3\frac{1}{2} \times 2=7$ 
    - (i) Semri Group
    - (ii) Singhbhum Granite
    - (iii) Shillong Group

## UNIT-II

- 3. (a) Give a general stratigraphic succession of the Triassic rocks of Spiti region.
  - (b) Define trap rock. Write a brief stratigraphical note on the Deccan traps with reference to petrology, stratigraphical subdivisions and age with examples of fossils.

    1+6=7
- 4. Write short stratigraphical notes on any four of the following: 3½×4=14
  - (a) Patcham Formation
  - (b) Uttatur Formation

- (c) Bagh Bed
- (d) Succession of Siwalik Group
- (e) Jaintia Group
- (f) Tipam Group

#### GROUP-B

## ( Palaeontology )

#### UNIT-III

- 5. (a) Define fossil. List the different modes of preservation of fossils. Explain any two of them.

  1+2+4=7
  - (b) What are microfossils? What are the different types of microfossils? Add a note on their significance. 1+3+3=7
- 6. Describe the evolutionary trends observed in Equidae with neat sketches. 12+2=14

#### UNIT-IV

7. (a) Give general morphological features of brachiopod shells with drawing and labelling. 8+2=10

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(Turn Over)

- (b) Mention the morphological differences between brachiopods and pelecypods.
- 8. Write short notes on any four of the following:

  3½×4=14
  - (a) Forms of foraminifera
  - (b) Cephalon in trilobites
  - (c) Regularia and irregularia echinoids
  - (d) Gangamopteris
  - (e) Ptilophyllum
  - (f) Suture lines in cephalopods

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