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(6th Semester)

GEOLOGY

NINTH PAPER

(Palaeontology and Stratigraphy—II)

Full Marks : 55

Time : 2½ hours

(PART : B—DESCRIPTIVE)

(Marks : 35)

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

Answer **five** questions, taking **one** from each Unit

UNIT—I

1. (a) Write the principle of fossil correlation.
How to correlate rock strata using index fossil? Explain with suitable example. 1+3=4
- (b) Suppose the palaeontological team discovered a new species of phylum brachiopoda at keifang quarry. Write different steps of new species naming, giving appropriate genus and species. 3

2. (a) Elaborate the palaeontological evidences of evolution. 4
- (b) Write a brief note on different methods to identify a species. 3

UNIT—II

3. Write notes on the following : 3½+3½=7
- (a) Classification of plant fossils
- (b) Middle Siwalik vertebrate fauna
4. Write notes on the following : 3½+3½=7
- (a) Characteristics of Superclass Pisces
- (b) *Glossopteris*

UNIT—III

5. Write a note on the application of microfossils in petroleum exploration. 7
6. Give accounts of the morphological characteristics, geological distribution and palaeoecology of any *two* of the following : 3½×2=7
- (a) Foraminifera
- (b) Radiolaria
- (c) Spores and pollen

(3)

UNIT—IV

7. Describe the stratigraphic successions of the following : $3\frac{1}{2}+3\frac{1}{2}=7$
- (a) Archean of South India
 - (b) Cretaceous of Tiruchirapalli
8. Write short notes on any *two* of the following : $3\frac{1}{2}\times 2=7$
- (a) Upper Trias
 - (b) Muth Formation
 - (c) Panjal Volcanics
 - (d) Talchir Group

UNIT—V

9. Describe the lithostratigraphic succession of Siwalik supergroup in terms of lithology and fossil assemblages. 7
10. Write notes on the following : $3\frac{1}{2}+3\frac{1}{2}=7$
- (a) Lithostratigraphic succession of Assam
 - (b) Geology of Andaman

Subject Code : GEOL/VI/09

Booklet No. **A**

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Date Stamp

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To be filled in by the Candidate

DEGREE 6th Semester
(Arts / Science / Commerce /
.....) Exam., **2017**
Subject
Paper

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To be filled in by the Candidate

DEGREE 6th Semester
(Arts / Science / Commerce /
.....) Exam., **2017**
Roll No.
Regn. No.
Subject
Paper
Descriptive Type
Booklet No. B

INSTRUCTIONS TO CANDIDATES

- 1. The Booklet No. of this script should be quoted in the answer script meant for descriptive type questions and vice versa.
- 2. This paper should be ANSWERED FIRST and submitted within 45 minutes of the commencement of the Examination.
- 3. While answering the questions of this booklet, any cutting, erasing, overwriting or furnishing more than one answer is prohibited. Any rough work, if required, should be done only on the main Answer Book. Instructions given in each question should be followed for answering that question only.

Signature of
Scrutiniser(s)

Signature of
Examiner(s)

Signature of
Invigilator(s)

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(6th Semester)

GEOLOGY

NINTH PAPER

(Palaeontology and Stratigraphy—II)

(PART : A—OBJECTIVE)

(Marks : 20)

The figures in the margin indicate full marks for the questions

SECTION—A

(Marks : 5)

1. Put a Tick (✓) mark against the correct answer in the brackets provided : 1×5=5

(a) Which of the following fossils is not used for Gondwana land reconstruction?

(i) *Cynognathus* ()

(ii) *Gangamopteris* ()

(iii) *Mesosaurus* ()

(iv) *Moeritherium* ()

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(2)

(b) The most taxonomically important part of vertebrate fossil body is

(i) neckbone ()

(ii) notochord ()

(iii) molar ()

(iv) skull ()

(c) Microfossils are generally not larger than

(i) 2 mm ()

(ii) 4 mm ()

(iii) 1 mm ()

(iv) 6 mm ()

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(3)

(d) The unfossiliferous _____ of Precambrian age are overlaid conformably by the Cambrian rocks in Kashmir.

(i) muth quartzites ()

(ii) syringothyris limestones ()

(iii) dogra slates ()

(iv) fenestella shales ()

(e) The recommended volcanic activity of Deccan Trap was occurred at

(i) 60–65 Ma ()

(ii) 63–68 Ma ()

(iii) 65–66 Ma ()

(iv) 30–100 Ma ()

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(4)

SECTION—B

(Marks : 15)

2. Write notes on the following :

3×5=15

(a) Living fossils with example

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(5)

(b) Origin of class Reptilia

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(6)

(c) Conodonts

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(7)

(d) Economic importance of Gondwana supergroup

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(8)

(e) Origin of Deccan Trap

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