

Ex/SC/GEOL/UG/CORE/TH/07/2024

BACHELOR OF SCIENCE EXAMINATION, 2024

(2nd Year, 1st Semester)

GEOLOGICAL SCIENCE

PAPER : CORE/TH/07

(Palaeontology)

Time : Two Hours

Full Marks : 40

Use separate Answer-Scripts for each part.

PART—I (20 Marks)

1. Answer the following questions (*any one*) : 8×1=8

- (a) What is temporal opening? Describe the classification of reptile based on the temporal opening with schematic diagrams.
- (b) Discuss “Telome theory” with suitable sketches.
- (c) Discuss the change of sporangium position during the evolution of plant with appropriate examples and diagrams.

2. Write short notes (*any three*) : 4×3=12

- (a) Lycopsidea

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(2)

- (b) Hyoid arch
- (c) Sauropods
- (d) Chlorophyta

PART—II (20 Marks)

1. Study Figure 1 and answer the following questions :

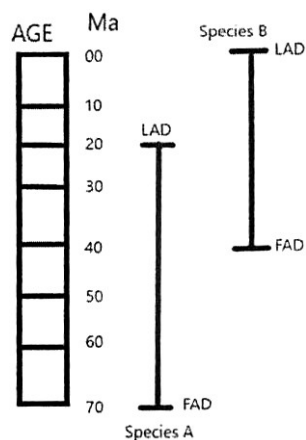


Figure 1: A schematic biozone of two foraminifera species

- (a) What is a biostratigraphic unit?
- (b) Which fossil is a good biostratigraphic indicator? Give an example.
- (c) What is the name of the biozone in Figure 1? Define the biozone.
- (d) What is the age of that zone? 1+2+2+1=6

(3)

2. Answer the following questions (*any five*) 2×5=10
- (i) What is Ichnology? What is Ichnofabric index?
 - (ii) What are the two types of coiling in gastropods? Give examples.
 - (iii) What are suture lines in ammonoids? Illustrate with a sketch.
 - (iv) Discuss the conditions necessary for the preservation of fossils.
 - (v) What are the major differences between “Brachiopods” and “Bivalves” shells?
 - (vi) What is a pallial line? How does it differ from a pallial sinus?
3. What are the environmental conditions that restrict the populations of organisms? Discuss briefly any two conditions with proper examples. 1+3=4

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