

**INDIAN INSTITUTE OF TECHNOLOGY
KHARAGPUR**

Date..... FN/AN TIME: 3 Hrs Full Marks: 100 No. of Students: 26
End Spring Semester, 2010 Deptt. Geology & Geophysics
II Year ExGe Sub. Name: Paleontology & Stratigraphy Sub No. GG 20003
Instructions: Attempt all the questions. Use same answer copy for both the sections.

(SECTION A)

Q 1 How are micropaleontological samples processed? Describe their paleoceanographic and paleoclimatologic importance with special reference to planktic foraminifera? (10)

Q 2 Where are siliceous microfossils found? Describe ecological preferences, paleoceanographic importance of Radiolaria. (10)

Q. 3 Write short notes on any *four* of the following: (2.5x4=10)

- (i) Biostratigraphic importance of Conodonts
- (ii) Dinoflagellates in paleoceanography
- (iii) Pteropods
- (iv) Pollen and spores
- (v) Calcareous nannofossils
- (vi) Tasmanitids

(SECTION B)

Q4. Write briefly (with sketches wherever required) on the following: (5x3=15)

- a) Dentition of Pelecypoda
- b) Different sutural pattern of Cephalopoda
- c) Different shapes of Gastropoda shell

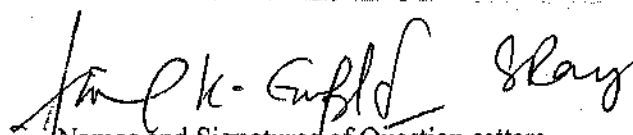
Q5. What is the basic body plan of the Agnatha? Write briefly on the four subgroups within Reptilia. (3+12=15)

Q6. Define the following (with sketches wherever necessary): (2x5=10)

- a) Formation
- b) Interval Zone
- c) Acme Zone
- d) Eonothem
- e) Member

Q7. Write short notes on the following: (6x5=30)

- a) Characteristic features of the Purana basins
- b) Continental flood basalts
- c) Stratigraphy of the Vindhyan basin
- d) Characteristics features of the Gondwana basins
- e) Singhbhum Craton


Names and Signatures of Question setters
(Prof. A.K. Gupta and Dr. S. Roy)