

[2]

Or

On what aspects reptiles are considered more developed with respect to amphibians? 'Fossil record shows not all dinosaurs were herbivorous' – Accept or reject the statement with reason. 4+3=7

2. Write notes on any **two** with necessary sketches: 3×2=6
- Megalospheric and microspheric tests of foraminifera.
 - Classification of radiolarian test.
 - Gill-arch transformation and evolution of jaws.

PART – II

Answer the following questions briefly (**any two**): 10×2=20

- Explain with diagrams the morphology of Ammonoids and discuss on the evolution of the suture pattern.
- Discuss the timing, causes and impact of the mass extinction events which led to the disappearance of major faunal groups in the Earth History.
- Explain Enation theory and Telome theory in the evolutionary process of land plants.

Ex/SC/GEOL/PG/CORE/TH/08/2022

M. Sc. (APPLIED GEOLOGY) EXAMINATION, 2022

(1st Year, 2nd Semester)

PALEONTOLOGY

PAPER – CORE/TH/08

Time : Two hours

Full Marks : 40

(Use a separate Answer script for each Part)

PART – I

- Answer **any two** questions: 7×2=14
 - Why are foraminifers considered as the most important group of microfossils? Why are benthonic foraminifers considered more important than planktonic forms in paleoecologic reconstruction? Discuss the basis of classification of foraminifers. 2+3+2=7
 - What is duplicature in ostracode morphology? Discuss different types of hinges present as the morphological expressions in ostracodes. Discuss briefly the evolutionary history of Ostracoda with time. 2+3+2=7
 - Why is discovery of Acanthodian an important phenomenon in the study of vertebrate evolution? Justify your answer enumerating the indicative character of the acanthodians. 3+4=7

[Turn over