

[2]

5. Describe the sedimentological evolution of the Assam Basin. 4
6. Comment on 'Triassic aridity' from the sedimentary successions of Peninsular India. 4
7. Briefly describe the stratigraphic succession of Jaisalmer Basin. 4
8. Describe the paleoenvironment of deposition across extrapeninsular India during Jurassic Period. 4

PART – II

Answer **any five (5)** questions. 4×5=20

1. Why is the extent of P-wave shadow zone more than the S-wave shadow zone? Explain.
2. Write the major difference between a transform fault and a transcurrent fault.
3. Write the important evidences in support of the continental drift theory.
4. What are the major differences between divergent and convergent plate boundaries?
5. Are the heat transporting mechanisms in upper mantle and outer core of the Earth similar? Justify your answer.
6. What is Rayleigh Number? How does it influence the plate tectonics through geological time in earth?
7. Write the causes of the major driving forces acted on the lithosphere?

Ex/SC/GEOL/UG/CORE/TH/10/2022

B. SC. (GEOLOGICAL SCIENCES) EXAMINATION, 2022

(2nd Year, 2nd Semester)

PHANEROZOIC STRATIGRAPHY OF INDIA AND TECTONICS

PAPER – CORE/TH/10

Time : Two hours

Full Marks : 40

(Use a separate Answer script for each Part)

PART – I

Answer **Q. 1** and **any four** questions from the rest.

1. Match the following fossils with age 4

Fossils

Age

Pseudomonotis himaica

Lr. Carboniferous

Syringothyris cuspidata

Aptian

Bruhathakayosaurus matleyi

Turonian

Placenticerus mintoii

Late Permian

Deshayesites bosei

Lr. Triassic

Gondwanasaurus bijoriensis

Maastrichtian

2. "Sea level changes in Spiti area do not follow the global trends in eustatic sea-level changes during Paleozoic Period" – discuss. 4
3. 'Kashmir area witnessed a local transgression during Permian time' – Justify. 4
4. Write a note on the Permo-Triassic boundary in Peninsular India. 4

[Turn over