

Stratigraphy of India: TEST 13

50 OUT OF 100 MCQS

1. The oldest rocks of India, belonging to the Archean Eon, are found in which region? A) Deccan Plateau B) Aravalli Range C) Eastern Ghats D) Dharwar Craton
2. The Dharwar Supergroup is broadly correlated with which age? A) Archean B) Proterozoic C) Paleozoic D) Mesozoic
3. The Cuddapah Basin in Andhra Pradesh represents which type of sedimentary basin? A) Foreland basin B) Intracratonic basin C) Rift basin D) Back-arc basin
4. Which formation of the Gondwana Supergroup contains the most economically important coal seams of India? A) Talchir Formation B) Barakar Formation C) Raniganj Formation D) Damuda Formation
5. The Talchir Formation at the base of the Gondwana sequence is characterized by: A) Massive sandstones B) Tillite and varved shales indicating glacial origin C) Freshwater limestone D) Red beds with wind-blown structures
6. Which fossil plant genus is the index fossil of the Lower Gondwana (Permian) rocks of India? A) Gangamopteris B) Glossopteris C) Vertebraria D) Ptilophyllum

7. The Vindhyan Supergroup is assigned to which age? A) Archean
B) Early Proterozoic C) Middle to Late Proterozoic D) Early Paleozoic
8. Which formation in the Vindhyan Supergroup yields stromatolites and is used as a time marker? A) Bhander Formation B) Semri Group C) Rewa Group D) Kaimur Formation
9. The term "Peninsular Gneissic Complex" refers to: A) Proterozoic metamorphic rocks of Central India B) The oldest Archean gneisses forming the basement of Peninsular India C) Granites intruding Dharwar schist belts D) Migmatites of the Eastern Ghats
10. The Aravalli Supergroup is considered to be younger than: A) Vindhyan Supergroup B) Dharwar Supergroup C) Cuddapah Supergroup D) Delhi Supergroup
11. Which stratigraphic unit of the Himalaya contains the famous Siwalik fauna? A) Murree Formation B) Dharamsala Group C) Siwalik Group D) Subathu Formation
12. The Siwalik Group (Sub-Himalaya) is assigned to which geological period? A) Eocene to Oligocene B) Miocene to Pleistocene C) Cretaceous to Paleocene D) Oligocene to Miocene
13. The Deccan Traps were erupted primarily during which geological time? A) Jurassic B) Late Cretaceous to Early Paleocene (around K-Pg boundary) C) Early Cretaceous D) Eocene
14. Which formation in Rajasthan yields economically important lead-zinc ore deposits hosted in Proterozoic rocks? A) Raialo Formation B) Zawar Formation C) Bhilwara Formation D) Alwar Formation

15. The "Banded Iron Formations" (BIF) of India are classically associated with which geological sequence? A) Vindhyan Supergroup B) Dharwar Supergroup (Iron Ore Group) C) Gondwana Supergroup D) Cuddapah Supergroup
16. Gondwana sediments in India were deposited in which type of structural setting? A) Open marine shelf B) Intracratonic rifts and grabens C) Foreland basins D) Passive continental margins
17. The Spiti Valley in Himachal Pradesh is famous for which geological sequence? A) Archean gneisses B) Proterozoic stromatolites C) A nearly complete Paleozoic to Mesozoic marine sequence D) Gondwana coal measures
18. The index fossil Ammonite Spiti Shale (Tethys Himalaya) is assigned to which period? A) Triassic B) Jurassic C) Cretaceous D) Permian
19. The Gondwana stratigraphy of India is broadly divided into: A) Upper and Lower Gondwana B) Early, Middle, and Late Gondwana C) Lower, Middle, and Upper Gondwana D) Permian and Triassic Gondwana only
20. The Panchet Formation of the Lower Gondwana sequence corresponds to which geological period? A) Permian B) Early Triassic C) Late Triassic D) Jurassic
21. The Rajmahal Traps of Jharkhand are basaltic flows of which age? A) Early Cretaceous B) Late Cretaceous C) Paleocene D) Eocene
22. Which fossil plant is found in the Jurassic rocks (Upper Gondwana) of India and is a key indicator? A) Glossopteris B) Ptilophyllum C) Gangamopteris D) Lepidodendron

23. The marine Cretaceous rocks of India are best exposed in which region? A) Deccan Plateau interior B) Trichinopoly (Ariyalur) area of Tamil Nadu C) Kashmir Valley D) Rajasthan Desert
24. The "Salt Range" of Pakistan (relevant to Indian stratigraphy) contains which unique geological feature? A) Archean basement exposed at surface B) An evaporite sequence (Salt Formation) of Cambrian age C) Gondwana coal measures D) Tethyan marine Triassic
25. Which stratigraphic system is absent or poorly represented in the Peninsular India geological record? A) Proterozoic B) Paleozoic (Cambrian to Carboniferous) C) Mesozoic D) Cenozoic
26. The Eastern Ghats Mobile Belt is largely composed of rocks of which age and type? A) Archean greenstone belts B) Proterozoic high-grade metamorphic granulites C) Paleozoic sedimentary sequences D) Mesozoic volcanic rocks
27. The Cretaceous-Paleogene (K-Pg) boundary in India is marked by: A) A major marine transgression B) The eruption of the Deccan Traps C) A major glaciation event D) The Himalayan orogeny
28. The Subathu Formation of the Himalayan foreland represents which depositional environment? A) Fluvial B) Deltaic C) Shallow marine (Eocene transgression) D) Lacustrine
29. The Proterozoic Cuddapah Basin is bounded on the east by which major structural feature? A) Eastern Ghats thrust B) Nellore Schist Belt C) Godavari Graben D) Nallamalai Fold Belt

30. The Andaman and Nicobar Islands represent an exposed part of which geological feature? A) Gondwana fragment B) Subduction-related accretionary prism and volcanic arc C) Archean craton D) Passive continental margin
31. The Spilitic basalts and cherts associated with ophiolites in the Indus Suture Zone (Ladakh) represent: A) Continental flood basalts B) Oceanic crust of the ancient Tethys Ocean C) Island arc volcanics D) Back-arc basin volcanics
32. The Delhi Supergroup is younger than the Aravalli Supergroup and is assigned to which age? A) Early Archean B) Late Archean C) Early Proterozoic D) Middle to Late Proterozoic
33. The Gondwana coal fields of the Damodar Valley are associated with which river valley system? A) Mahanadi B) Son C) Damodar D) Godavari
34. Which zone of the Himalaya contains the highest-grade metamorphic rocks including kyanite and sillimanite schists? A) Sub-Himalaya (Siwalik Zone) B) Lesser Himalaya C) Higher Himalayan Crystallines (Main Central Thrust Zone) D) Tethys Himalaya
35. The "Rehamna" type unconformity in the Vindhyan sequence is of which type? A) Angular unconformity B) Disconformity C) Nonconformity D) Paraconformity
36. The famous "Rana Pratap Sagar" near Kota, Rajasthan exposes which geological sequence? A) Vindhyan Supergroup B) Aravalli Supergroup C) Deccan Traps D) Malani Igneous Suite
37. The Malani Igneous Suite of Rajasthan is significant because it represents: A) The oldest Archean granite of India B) The largest

Neoproterozoic magmatic event in South Asia C) Gondwana-related volcanism D) Subduction-related arc magmatism

38. The Permo-Carboniferous glaciation recorded in Indian geology is evidenced by: A) Loess deposits B) Talchir Boulder Bed (tillite) at the base of Gondwana C) Striated pavements in Gondwana rocks D) Both B and C
39. The Garhwal Group of the Lesser Himalaya contains: A) Archean basement gneisses only B) Proterozoic sedimentary and low-grade metamorphic rocks C) Siwalik fluvial sequences D) Tethyan marine Paleozoic rocks
40. Which index fossil is used to date the Upper Cretaceous Ariyalur Group of Tamil Nadu? A) Belemnites B) Ammonites like Pachydiscus C) Echinoids D) Bivalves like Inoceramus
41. The Warkalli and Quilon Beds of Kerala represent: A) Archean basement B) Gondwana coal measures C) Neogene (Miocene) marine sediments D) Quaternary alluvium
42. The "Infra-Trappean" beds found below the Deccan Traps in the Narmada Valley yield: A) Marine Cretaceous fossils B) Freshwater and terrestrial Cretaceous fossils C) Permian plant fossils D) Archean stromatolites
43. The Cambay Basin (Gujarat) is significant for: A) Proterozoic sedimentary sequences B) Eocene to Recent hydrocarbon-bearing sediments C) Gondwana coal measures D) Archean iron ore deposits
44. The Barren Island in the Andaman Sea is associated with: A) Archean volcanic activity B) India's only active volcano C) Gondwana rifting D) Quaternary coral reef formation

45. The Rewa Group of the Vindhyan Supergroup is characterized by: A) Dolomites and stromatolitic limestones B) Predominantly sandstones (Rewa Sandstone) C) Shales with glaciogenic structures D) Banded iron formations
46. The Tethys Himalaya (Tibet Himalaya) sequence begins with which age strata at its base? A) Archean B) Cambrian C) Permian D) Triassic
47. Which of the following Gondwana coalfields is the largest producer of coal in India? A) Singareni Coalfield (Andhra Pradesh) B) Jharia Coalfield (Jharkhand) C) Korba Coalfield (Chhattisgarh) D) Wardha Valley Coalfield (Maharashtra)
48. The Shillong Plateau of Meghalaya exposes rocks belonging to which age? A) Late Archean to Early Proterozoic B) Gondwana Supergroup C) Cretaceous marine sediments D) Eocene limestone
49. The presence of Nummulites (large foraminifera) in the Eocene rocks of India is most characteristic of: A) Kutch Basin, Gujarat B) Khasi Hills, Meghalaya C) Himalayan foothills (Subathu) D) All of the above
50. The "Kundair" and "Bijori" Formations of the Gondwana sequence in the Satpura Basin represent which age? A) Upper Permian B) Triassic C) Jurassic D) Early Cretaceous