

## GOVERNMENT ZIRTIRI RESIDENTIAL SCIENCE COLLEGE

Subject: Geology

Paper name: Palaeontology and Stratigraphy-II

Paper No: XVII

Semester: Sixth semester

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A. Multiple choice questions [75 (15 from each unit)]

1. Which man is known as Java man
  - a) Ramapithecus
  - b) Australopithecus
  - c) Pithecanthropus
  - d) Sinanthropus
  
2. Taphonomy is the science dealing with
  - a) Study of the conditions of the burial of fossils
  - b) Reconstruction of paleo-environments by means of fossils
  - c) Modes of preservation of fossils
  - d) Study of fossil pores and spores
  
3. Which of the following modes of preservation of fossils is rare?
  - a) Preservation of the entire organism
  - b) Preservation of hard parts
  - c) Preservation of original form
  - d) Alteration of hard parts
  
4. Petrification is a type of fossilization where
  - a) Original form is preserved
  - b) Original form and structure is preserved
  - c) Entire organism is preserved
  - d) Only the hard parts are preserved
  
5. Fossil fecal pellets of ancient animals are described as
  - a) Gastroliths
  - b) Coproliths
  - c) Beekite rings
  - d) Pseudo-fossils
  
6. The term living fossil refers to
  - a) a species which was thought to be extinct but which is in fact living
  - b) a species which has acquired all the characters of its predecessors
  - c) a species which has retained all the primitive characters of its ancestors and has survived much longer than its counterparts
  - d) a species which is at its acme of evolution
  
7. What is the fundamental unit of taxonomy
  - a) Family
  - b) Genus

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- c) Species
  - d) Order
8. Dinosaurs were living during
- a) Proterozoic
  - b) Paleozoic
  - c) Mesozoic
  - d) Cenozoic
9. Which was the first horse in the world
- a) Merychippus
  - b) Equus
  - c) Eohippus
  - d) Mesohippus
10. The skeleton of Radiolaria is usually composed of
- a) Silica
  - b) Chitin
  - c) Calcite
  - d) Organic cell wall
11. Ostracods falls under the phylum of
- a) Mollusca
  - b) Arthropoda
  - c) Chordata
  - d) None of the above
12. The carapace of ostracods is usually
- a) Siliceous
  - b) Chitinous
  - c) Phosphatic
  - d) Calcareous
13. Conodonts are composed of
- a) Magnesium sulphate
  - b) Silica
  - c) Calcium Phosphate
  - d) Calcite
14. Which of the following lived exclusively in the photic zone?
- a) Diatoms
  - b) Coccoliths
  - c) Foraminifers
  - d) Radiolaria
15. Which of the following helped in oil exploration?
- a) Foraminifers
  - b) Ostracods
  - c) Dinoflagellates
  - d) Silicoflagellates

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16. Which of the following had no proboscis
  - a) Mastodon
  - b) Dinotherium
  - c) Barytherium
  - d) Moeritherium
  
17. The first dinosaur appeared in
  - a) Early Triassic
  - b) Late Triassic
  - c) Early Jurassic
  - d) Late Jurassic
  
18. The origin of man is believed to have taken place in
  - a) Europe
  - b) North America
  - c) Africa
  - d) Central Asia
  
19. The earliest evidence of elephants was reported from
  - a) North America
  - b) South America
  - c) India
  - d) Egypt
  
20. The Mastodons originated in
  - a) Eocene
  - b) Oligocene
  - c) Miocene
  - d) Pliocene
  
21. The horse Hyracotherium possessed
  - a) Four toes
  - b) Three toes
  - c) Two functional toes
  - d) A single functional toe
  
22. The first species of horses which showed divergence into several branches was
  - a) Eohippus
  - b) Miohippus
  - c) Merychippus
  - d) Pliohippus
  
23. The foraminifers belong to the class
  - a) Sarcodina
  - b) Sporozoa
  - c) Flagellata
  - d) Mastigophora
  
24. Which was the largest dinosaur to walk on the land?

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- a) Ultrasaurus
  - b) Tyrannosaurus
  - c) Diplodocus
  - d) Brachiosaurus
25. Nummulites were abundant rock-building foraminifers during
- a) Silurian
  - b) Devonian
  - c) Carboniferous
  - d) Eocene
26. It is believed that the average rate of evolution of one genus of horses was approximately
- a) 5.5 M.Y
  - b) 6.5 M.Y
  - c) 7.5 M.Y
  - d) 10 M.Y
27. Which is the earliest fossil in India recorded from India from Carboniferous
- a) Sauringo thinous
  - b) Archaeopteryx
  - c) Telcenodon
  - d) Antolepis
28. Oldest dinosaur is known as
- a) Antolepis
  - b) Eoraptall
  - c) Telcenodon
  - d) None of these
29. Which one belongs to proboscidea order
- a) Man
  - b) Elephant
  - c) Horse
  - d) Fish
30. Which of the following has agglutinated shell
- a) Conodonts
  - b) Radiolarians
  - c) Foraminifers
  - d) Spores and pollens
31. Which boundary is known as mother of all mass extinction?
- a) Precambrian-Cambrian
  - b) Cretaceous-Tertiary
  - c) Permian-Triassic
  - d) Jurassic-Cretaceous
32. Ichnofossil is
- a) An Index fossil

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- b) A living fossil
  - c) Trace fossil
  - d) None of the above
33. Which period is the age of fish?
- a) Carboniferous
  - b) Permian
  - c) Devonian
  - d) Triassic
34. The dominant forms of microfossils in the abyssal regions are
- a) Diatoms
  - b) Ostracods
  - c) Foraminifers
  - d) Radiolarians
35. The Cro Magnon man was discovered in
- a) Africa
  - b) France
  - c) Asia
  - d) Germany
36. The immediate ancestors of the mammoths were
- a) Stegodons
  - b) Mastodons
  - c) Laxodonts
  - d) Phiomia
37. The time of slow evolutionary change is described as
- a) Bradytelic evolution
  - b) Horotelic evolution
  - c) Trachytelic evolution
  - d) Panchronism
38. Which of the following represents the most primitive of all the Foraminifers?
- a) Saccamina
  - b) Astorhiza
  - c) Hyperamina
  - d) Allogromia
39. The shells of Foraminifers are made up of
- a) Calcium Carbonate
  - b) Arenaceous sediments
  - c) Chitin
  - d) Any of the above
40. In some foraminifers the shell is provided with perforations in order to facilitate
- a) Breathing of the organism
  - b) Passage of pseudopodia
  - c) Disposal of organic wastes

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- d) Exchange of constituents between the body fluids and water
41. The youngest succession of Kutch Basin rock is represented by
- Mad Formation
  - Porabandar Formation
  - Umia Formation
  - Bhuj Formation
42. Which of the following is the youngest
- Muth Quartzite
  - Lameta Beds
  - Golden oolite
  - Karewa
43. Triassic rocks are well developed in
- Kumaon area
  - Spiti area
  - Kashmir area
  - Salt range
44. The rocks of the Lilang system are
- Limestones
  - Shales
  - Limestone and Shale
  - Sandstone
45. The Triassic rocks of Spiti are known as
- Kurnool System
  - Lilang System
  - Umia System
  - Chari System
46. Uncoiled ammonites are characteristics of
- Uttatur stage
  - Niniyur stage
  - Ariyalur stage
  - Trichinopoly stage
47. The zamia beds, Ukra beds and Bhuj beds belong to
- Patcham series
  - Chari series
  - Katrol series
  - Umia series
48. Kuling system of Spiti is of
- Permian
  - Carboniferous
  - Ordovician
  - Cambrian

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49. The Giupal series of Spiti is of
- Lower Cretaceous age
  - Upper Cretaceous age
  - Lower Eocene
  - Upper Eocene
50. In India, the triassic system of rocks are found as
- Marine facies
  - Marine geosynclinal facies
  - Marine transgressed
  - Fluvio-Lacustrine facies
51. The lameta beds of Jabalpur represent
- Marine facies
  - Marine transgressed facies
  - Volcanic facies
  - Fluvio-lacustrine facies
52. Bhuj Formation is the name given to
- Ukra beds
  - Umara marine beds
  - Umia Ammonite beds
  - Umia plant beds
53. During the Jurassic period, a marine transgression took place from
- East
  - West
  - Southeast
  - Southwest
54. Remains of dinosaurs have not been recorded from
- Bagh beds
  - Umia beds
  - Lameta beds
  - Panchet formation
55. The youngest group of rocks in the Assam-Arakan region belongs to
- Eastern Disang group
  - Jaintia group
  - Duptila group
  - Dihing group
56. The Siwaliks belong to
- Lesser Himalayas
  - Greater Himalayas
  - Outer Himalayas
  - Central Himalayas
57. The trend of Spiti synclinerium is similar to that of
- The Eastern Ghats

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- b) The Aravallis
  - c) The Himalayas
  - d) The Satpuras
58. The Cenomanian Transgression occurred during
- a) Triassic Period
  - b) Jurassic
  - c) Cretaceous
  - d) Miocene
59. The rocks exposed in Spiti valley range in age from
- a) Precambrian to present
  - b) Precambrian to Cretaceous
  - c) Cambrian to recent
  - d) Cambrian to Cretaceous
60. Which of the following basin is petroliferous?
- a) Assam-Arakan basin
  - b) Vindhyan basin
  - c) Cudappah basin
  - d) All of these
61. The Kanawar system of the Spiti valley consists of rock formations deposited during
- a) Lower to middle Carboniferous
  - b) Upper Carboniferous to Permian
  - c) Permian to Triassic
  - d) Triassic to Jurassic
62. In the cretaceous succession of the Cauvery basin, dinosaurian bones are characteristically present in the rocks of
- a) Uttatur group
  - b) Tiruchirapalli group
  - c) Ariyallur group
  - d) Niniyur formation
63. In India, deposition of rocks took place in diverse type of environments during
- a) Triassic
  - b) Jurassic
  - c) Cretaceous
  - d) Quaternary
64. The youngest formation in the Karewas of Kashmir is
- a) Dilpur formation
  - b) Nagam formation
  - c) Hirpur formation
  - d) Panjal Traps
65. Lameta Formation is popularly known for
- a) Precambrian-Cambrian boundary
  - b) P-T boundary

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- c) K-T boundary
  - d) Jurassic-Cretaceous boundary
66. The depositional environment of Nimar Sandstone of Bagh bed is
- a) Fluvial
  - b) Deltaic
  - c) Tidal
  - d) Marine
67. The Jurassic of Kutch is overlain by
- a) Deccan Trap
  - b) Rajmahal trap
  - c) Sylhet Trap
  - d) Pir Panjal Trap
68. The southeastern coast of India was submerged by the transgressing sea during
- a) Permian
  - b) Cretaceous
  - c) Jurassic
  - d) Triassic
69. The age of Karewa sediments are of
- a) Late Paleocene
  - b) Early Miocene
  - c) Oligo-Miocene
  - d) Plio-Pleistocene
70. which one is the most famous for vertebrate in India
- a) Aravallis
  - b) Vindhya
  - c) Siwaliks
  - d) All of the above
71. Bird's fossils are very rare because of
- a) Hollow bones
  - b) Flying characters
  - c) Very high weight
  - d) both a and b
72. In which stage of Kurnool system, diamonds are found
- a) Panian
  - b) Kundair
  - c) Bengnapali
  - d) Jammalmadugu
73. The basement rock of Karewa is
- a) Deccan Trap
  - b) Late Permian Panjal Trap
  - c) Bagh bed
  - d) Sylhet Trap

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74. The depositional environment for the Tipam group of rock is
- Fluvial
  - Fluvio-Deltaic
  - Deltaic
  - Lacustrine
75. The general trend of the anticlinal ridges in Mizoram is
- NE-SW
  - E-W
  - non-uniform
  - N-S

### B. Fill up the blanks [15 (3 from each unit)]

- Kanwar system of spiti is of \_\_\_\_\_
- A \_\_\_\_\_ is the impression of an organism in the surrounding sediment.
- The study of the conditions of burial of fossils is called \_\_\_\_\_
- \_\_\_\_\_ are identical species names that denote different species groups.
- Dinotherium became extinct during \_\_\_\_\_
- \_\_\_\_\_ is also known as Australian fossil man.
- The brain capacity of Neanderthals is \_\_\_\_\_
- Equus first appeared during \_\_\_\_\_
- The Order \_\_\_\_\_ is comprised of herbivorous dinosaurs
- During Pleistocene, Kashmir witnessed \_\_\_\_\_ phases of glaciation
- Zewan belongs to \_\_\_\_\_
- Trace fossils are known as \_\_\_\_\_
- The oldest formation of the Assam Arakan basin is \_\_\_\_\_
- The age of barail group is \_\_\_\_\_
- The coastal part of northwestern India came under marine influence during \_\_\_\_\_

### Key Answers

#### A. Multiple choice questions [replace x]

- c)2. a)3. a)4. b)5. b)6. c)7. c)
- c)9. c)10. a)11. b)12. d)13. c)14. b)
- a)16. d)17. b)18. c)19. d)20. b)21. a)
- c)23. a)24. d)25. d)26. c)27. a)28. b)
- b)30. c)31. b)32. c)33. c)34. d)35. b)
- a)37. a)38. d)39. d)40. b)41. b)42. d)
- b)44. c)45. b)46. a)47. d)48. a)49. a)
- b)51. d)52. d)53. b)54. a)55. d)56. c)
- c)58. c)59. b)60. a)61. a)62. c)63. c)
- a)65. c)66. b)67. a)68. b)69. d)70. c)
- b)72. c)73. b)74. a)75. d)

#### B. Fill up the blanks [replace x]

## **GOVERNMENT ZIRTIRI RESIDENTIAL SCIENCE COLLEGE**

1. carboniferous
2. moulds
3. Taphonomy
4. Homonyms
5. Pleistocene
6. Australopithecus
7. 1450 cc
8. Upper Pliocene
9. Ornithischia
10. Four
11. Middle and upper permian
12. ichnofossil
13. Langpar Formation
14. Oligocene
15. Jurassic Period