## **GEOLOGY** (Final)

- 1. What is the mean radius of the Earth?
  - A. 6137 km
  - B. 6317 km
  - C. 6731 km
  - D. 6371 km
- 2. What is the distance between the Moon and the Earth?
  - A. 180000 km
  - B. 280000 km
  - C. 380000 km
  - D. 480000 km
- 3. What is the difference between the polar radius and the equatorial radius of the Earth?
  - A. 21 km
  - B. 62 km
  - C. 120 km
  - D. 210 km
- 4. At what velocity seismic P-waves travel in granite?
  - A. 2 km/s
  - B. 6 km/s
  - C. 12 km/s
  - D. 20 km/s

5. Who discovered that the Earth has a solid inner core inside a molten outer core?

- A. Beno Gutenberg
- B. Andrija Mohorovicic
- C. Charles Richter
- D. Inge Lehman
- 6. What is the mean density of the Earth in g/cc?
  - A. 2.51
  - B. 3.51
  - C. 4.51
  - D. 5.51

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- 7. Which of the following is the most dominant mineral in granite?
  - A. Quartz
  - B. Feldspar
  - C. Hornblende
  - D. Biotite
- 8. To measure which of the following, a contact goniometer is used?
  - A. Optical angle of minerals
  - B. Hardness of minerals
  - C. Reflectance of minerals
  - D. Interfacial angle of crystals
- 9. Match the twin law/type with the appropriate mineral
  - 1. Brazil a. Plagioclase
  - 2. Iron cross b. Gypsum
  - 3. Manebach c. Quartz
  - 4. Pericline d. Pyrite
  - 5. Swallo-tail e. Orthoclase
  - A. 1a-2b-3c-4d-5e
  - B. 1a-2c-3e-4d-5b
  - C. 1c-2b-3a-4e-5b
  - D. 1c-2d-3e-4a-5b
- 10. Which of the following *can not* become a twin axis?
  - A. 2-fold symmetry axis
  - B. 3-fold symmetry axis
  - C. 4-fold symmetry axis
  - D. 6-fold symmetry axis

- 11. Match the twin law/type with the appropriate crystal system.
  - 1. Dauphinea. Isometric2. Iron-crossb. Tetragonal3. Genticulatedc. Monoclinic4. Periclined. Trigonal
  - 5. Swallo-tail e. Triclinic
  - A. 1a-2b-3c-4d-5e
  - B. 1a-2b-3d-4e-5c
  - C. 1d-2a-3e-4b-5c
  - D. 1d-2a-3b-4e-5c
- 12. Which of the following minerals has the highest content of iron in it?
  - A. Magnetite
  - B. Hematite
  - C. Ilmenite
  - D. Wustite
- 13. Which of the following is *not* an ore of copper?
  - A. Pyrite
  - B. Chalcopyrite
  - C. Malachite
  - D. Azurite
- 14. Which of the following rocks hosts diamond?
  - A. Carbonatite
  - B. Komatiite
  - C. Lamprophyre
  - D. Lamproite
- 15. What is the interfacial angle between two adjacent faces of a hexagonal prism (in degrees)?
  - A. 30
  - B. 60
  - C. 120
  - D. 180

16. What is the Si:O ratio in single chain inosilicates?

- A. 1 : 2
- B. 1 : 3
- C. 1:4
- D. 2:7

17. Which among the following is *not* a cyclosilicate?

- A. Beryl
- B. Cordierite
- C. Epidote
- D. Tourmaline

18. Which of the following is *not* a metamorphic mineral?

- A. Kyanite
- B. Sillimanite
- C. Fayalite
- D. Graphite

19. Which of the following is characteristically formed at convergent plate margins?

- A. Andesites
- B. Basalts
- C. Pillow lavas
- D. Tholeiites
- 20. Which are the two common minerals in amphibolites?
  - A. Actinolite and tremolite
  - B. Amphibole and pyroxene
  - C. Hornblende and plagioclase
  - D. Ortho and clino amphiboles
- 21. Which of the following is a landform formed by the coalescing of alluvial fans?
  - A. Cuesta
  - B. Fjord
  - C. Bajada
  - D. Delta

- 22. Which of the following indicates an abrupt inflection of the longitudinal profile of a stream?
  - A. Pivot point
  - B. Inflection point
  - C. Knick point
  - D. Escarpment
- 23. What is the depth of the abyssal plain?
  - A. 1-3 km
  - B. 3-6 km
  - C. 6-9 km
  - D. 8-10 km
- 24. Which of the following refers specifically to glacial melting and removal of materials?
  - A. Corrosion
  - B. Corrasion
  - C. Ablation
  - D. Deflation
- 25. Which of the following geomorphic features represents the sea-ward end of a deeply excavated glacial trough valley?
  - A. Kettle
  - B. Moraine
  - C. Hogback
  - D. Fjord
- 26. To which of the following terms the models of Airy and of Pratt are related to?
  - A. anatexis
  - B. isostacy
  - C. peneplanation
  - D. charnockitization
- 27. Which is not a carbonate mineral?
  - A. aragonite
  - B. barite
  - C. strontianite
  - D. witherite



- 28. Match the chemical group with the appropriate mineral.
  - 1. Oxide a. Monazite
  - 2. Sulphide b. Ilmenite
  - 3. Sulphate c. Anhydrite
  - 4. Phosphate d. Siderite
  - 5. Carbonate e. Cinnabar
  - A. 1b-2e-3c-4a-5d
  - B. 1a-2c-3e-4d-5b
  - C. 1b-2c-3a-4e-5b
  - D. 1c-2d-3e-4a-5b

## 29. Match the mineral with the appropriate family/group

- Nepheline
   Omphacite
   Sanidine
   Anthophyllite
   Uvarovite
   Garnet
   Feldsparhoid
   Pyroxene
   Amphibole
   Garnet
- A. 1a-2c-3b-4d-5e
- B. 1a-2c-3d-4e-5b
- C. 1b-2c-3a-4d-5e
- D. 1b-2d-3e-4a-5c
- 30. Match the twin law/type with the appropriate mineral.
  - 1. Brazila. Plagioclase2. Iron crossb. Gypsum3. Manebachc. Quartz4. Periclined. Pyrite5. Swallo-taile. Orthoclase
  - A. 1a-2b-3c-4d-5e B. 1a-2c-3d-4d-5b C. 1c-2b-3a-4e-5b D. 1c-2d-3e-4a-5b
- 31. Which of the following is not a solid solution pair?
  - A. magnetite-ilmenite
  - B. quartz-cristobalite

- C. enstatite-diopside
- D. actinolite-tremolite
- 32. Match the mineral with the appropriate family/group
  - 1. Sodalite a. Nesosilicate
  - 2. Hypersthene b. Cyclosilicate
  - 3. Fuchsite c. Phyllosilicate
  - 4. Tourmaline d. Inosilicate
  - 5. Fayalite e. Tectosilicate
  - A. 1a-2c-3b-4d-5e
  - B. 1a-2c-3d-4e-5b
  - C. 1e-2d-3c-4b-5a
  - D. 1b-2d-3e-4a-5c
- 33. Match the minerals with the appropriate optical property
  - 1. Quartza. dichroism2. Zirconb. low relief3. Almandinec. high relief4. Tourmalined. twinkling5. Calcitee. complete extinction throughout rotation
  - A. 1b-2c-3d-4a-5e B. 1b-2c-3e-4a-5d C. 1e-2d-3c-4a-5b D. 1b-2d-3e-4a-5c
- 34. Which of the following is the basis for deciding the optic sign of a uniaxial mineral?
  - A. whether the e-ray or o-ray coincides with the c-axis
  - B. relative velocity of e-ray and o-ray
  - C. position of acute and obtuse bisectrices
  - D. relativerelief of the mineral

- 35. Match the mineral with the appropriate optical class
  - 1. Spinela. uniaxial positive2. Zirconb. uniaxial negative3. Tourmalinec. biaxial positive4. Muscovited. biaxial negative5. Gypsume. isotropic
  - A. 1c-2a-3b-4d-5e B. 1c-2a-3b-4e-5d C. 1e-2a-3b-4d-5c D. 1e-2a-3b-4c-5d

36. Which is the correct arrangement of minerals with their decreasing density?

- A. Magnetite Native gold Bartite-Cinnabar B. Native gold - Cinnabar - Barite – Magnetite C. Native gold – Cinnabar – Magnetite – Barite D. Cinnabar – Native gold – Magnetite – Barite
- 37. Match the ore minerals with the corresponding metals in them

1. Malachite	a. iron
2. Magnetite	b. copper
3. Manghanite	c. manganese
4. Smithsonite	d. zinc
5. Galena	e. lead

A. 1c-2a-3b-4d-5e B. 1b-2a-3c-4d-5e C. 1e-2a-3b-4d-5c D. 1e-2a-3b-4c-5d

38. Which property imparts *cat's eye* status to gemstones?

- A. dispersion
- B. internal reflection
- C. chatoyancy
- D. birefringence

- A. isometric
- B. tetragonal
- C. hexagonal
- D. monoclinic

40. With which of the following, the mineral rutile is polymorphous?

- A. Ilmenite
- B. anatase
- C. titanite
- D. pseudorutile
- 41. For which of the following minerals the type locality belongs to Kerala?
  - A. sillimanite
  - B. monazite
  - C. chrysoberyl
  - D. cheralite
- 42. Match the industrial minerals with the corresponding uses
  - 1. barite a. gemstone
  - 2. kyanite b. insulator
  - 3. gypsum c. cement industry
  - 4. vermiculite d. refractory
  - 5. chrysoberyl e. drilling mud
  - A. 1c-2d-3b-4e-5a B. 1e-2d-3c-4b-5a C. 1e-2c-3b-4d-5a D. 1e-2d-3b-4c-5a
- 43. Validate the correctness of the given statements
  - 1. An isometric mineral can never be pleochroic
  - 2. All dichroic minerals are biaxial
  - 3. All opaque minerals are isotropic
  - 4. No 2V can be measured for Tetragonal minerals
  - A. Statements 1 and 2 are correct, other two are incorrect
  - B. Statements 1 and 3 are correct, other two are incorrect

- C. Statements 2 and 4 are correct, other two are incorrect
- D. Statements 1 and 4 are correct, other two are incorrect
- 44. Which of the following is not a basic quality of a mineral to form a placer deposit?
  - A. high hardness
  - B. metallic nature
  - C. resistance to weathering
  - D. high specific gravity
- 45. Match the economic mineral deposit with their main process of formation.
  - 1. Ilmenite a. early magmatic segregates
  - 2. Bauxite b. pegmatitic
  - 3. Tourmaline c. hydrothermal
  - 4. Chromite d. residual deposit
  - 5. Copper e. placer
  - A. 1a-2d-3b-4e-5c B. 1e-2a-3b-4d-5c C. 1e-2d-3b-4a-5c
  - D. 1a-2e-3b-4d-5c
- 46. Which are the three most valuable mineral wealth produced by India in recent years?
  - A. Coal, petroleum, and iron ore
  - B. Coal, gold and copper
  - C. Coal, gold and ilmenite
  - D. Copper, iron ore and gold
- 47. For which of the mineral deposit India is the largest producer in the world?
  - A. coal
  - B. iron ore
  - C. gold
  - D. kyanite
- 48. Which of the following is the term used to refer to a confining bed that retards but does not prevent the flow of water to or from an adjacent bed?
  - A. aquifer
  - B. aquifuge
  - C. aquiclude
  - D. aquitard

- 49. What is the position of the perched water with respect to the water table?
  - A. just below the main water table
  - B. at same level as the water table
  - C. above the water table
  - D. either above or below the water table
- 50. What happens to the pH of groundwater when affected by marine incursion?
  - A. remains unchanged
  - B. increases
  - C. decreases
  - D. may either increase or decrease
- 51. In which of the terrains you can see sink-holes?
  - A. badlands
  - B. karst
  - C. lagoons
  - D. coral islands
- 52. How much percentage of the Earths's crust is made up of sedimentary rocks?
  - A. 5%
  - B. 10%
  - C. 20%
  - D. 30%
- 53. To which category of rocks the 'pyroclastics' belong to?
  - A. sedimentary
  - B. volcanic
  - C. plutonic
  - D. metamorphic
- 54. What is the minimum extent of a batholith in map?
  - A. 20 sq km
  - B. 50 sq km
  - C. 100 sq km
  - D. 200 sq km

- 55. What is the name given to short irregular dykes that extent from a pluton margin into the country rocks?
  - A. stocks
  - B. bosses
  - C. roof pendants
  - D. apophyses
- 56. What is the major constituent of a holohyaline rock?
  - A. crystal
  - B. fossil
  - C. glass
  - D. secondary minerals
- 57. Which of the following is made up chiefly of subhedral grains?
  - A. phaneric
  - B. panidiomorphic
  - C. allotriomorphic
  - D. hypidiomorphic
- 58. Which minerals are involved in diabasic texture?
  - A. quartz and feldspar
  - B. plagioclase and orthoclase
  - C. diposide and hypersthenes
  - D. augite and plagioclase
- 59. What name to be given to a plutonic rock with 20% quartz, 60% plagioclase, 15 % microcline and 5% biotite?
  - A. granite
  - B. granodiorite
  - C. diorite
  - D. syenite
- 60. In terms of the content of which mineral lherzolite differs from websterite?
  - A. olivine
  - B. orthopyroxene
  - C. clinopyroxene
  - D. hornblende



- 61. What is the plutonic equivalent of latite?
  - A. syenite
  - B. diorite
  - C. granodiorite
  - D. monzonite
- 62. What is the eutectic composition in the Diopside-Anorthite system?
  - A. An58 & Di 42
  - B. An42 & Di 58
  - C. An52 & Di 48
  - D. An48 & Di 52
- 63. Which of the rock can have the lowest content of silica?
  - A. carbonatite
  - B. kimberlite
  - C. lamprophyre
  - D. komatiite
- 64. Match the rock types with their corresponding place of occurrence
  - AmbaDongar
     Sithampundi
     Arsikere
     Putteti
     Malani
     Arsikere
     Carbonatite
  - A. 1e-2c-3b-4d-5a B. 1a-2c-3e-4d-5b C. 1c-2b-3a-4e-5b D. 1e-2b-3c-4d-5a
- 65. What is the common range of silica  $(SiO_2 wt.\%)$  in basalts?
  - A. 35-42B. 45-52C. 55-62D. 65-72

- 66. Which rocks dominate the ophiolite complexes?
  - A. sedimentary
  - B. felsic and intermediate
  - C. mafic and intermediate
  - D. mafic and ultramafic
- 67. Which of the following terms refer to melting of crustal rocks?
  - A. metasomatism
  - B. differentiation
  - C. anatexis
  - D. partial melting
- 68. What is the diameter of 'medium sand' sediment?
  - A. 0.25 -0.50 mm
    B. 0.50 -1.00 mm
    C. 1.00 -2.00 mm
    D. 2.00 -5.00 mm
- 69. What is the main chemical constituent of chert?
  - A. carbonates
  - B. silica
  - C. carbonaceous matter
  - D. biogenic matter
- 70. Which of the following is the most abundant in the Earth?
  - A. sandstones
  - B. mud rocks
  - C. carbonate rocks
  - D. carbonaceous rocks

## 71. What is the size range of microsparites?

- A. 0.002 0.004 mm
- B. 0.004 0.006 mm
- $C. \ \ 0.006 0.008 \ mm$
- $D. \ \ 0.008 0.01 \ mm$

- 72. Which of the following terms refer to the parent rock from which a metamorphic rock is derived?
  - A. provenance
  - B. protolith
  - C. source
  - D. facies
- 73. What is the lower temperature limit of metamorphism?
  - A. 100°C
  - B. 200°C
  - C. 300°C
  - D. 400°C
- 74. While describing which of the rock type the terms *leucosome* and *nesosome* are used?
  - A. carbonatite
  - B. kimberlite
  - C. lamprophyre
  - D. migmatite
- 75. Which pyroxene is typically seen in eclogites?
  - A. hypersthenes
  - B. augite
  - C. spodumene
  - D. omphacite
- 76. With which of these systems incongruent melting is associated?
  - A. Binary eutectic
  - B. Ternary eutectic
  - C. Solid solution
  - D. Peritectic
- 77. In which kind of rocks the mineral graphite is commonly seen?
  - A. sedimentary
  - B. volcanic
  - C. plutonic
  - D. metamorphic

- 78. What is the product of high-grade metamorphism of shell-limestone?
  - A. Carbonatite
  - B. metapelite
  - C. khondalite
  - D. marble

79. Which of the following is not likely a metabasalt?

- A. chlorite schist
- B. amphibolites
- C. mafic granulite
- D. khondalite
- 80. Which of the following is a sedimentary structure produced by algal growth?
  - A. bioturbation
  - B. convolute lamination
  - C. stromatolites
  - D. graptolites
- 81. The term lacustrine corresponds to
  - A. glacial
  - B. stream
  - C. ocean
  - D. lake
- 82. In which of the following systems separate solidus and liquidus are present?
  - A. Binary eutectic
  - B. Ternary eutectic
  - C. Solid solution
  - D. Peritectic
- 83. What is the name given on map of metamorphic terrain to a line connecting points of first appearance of a new mineral?
  - A. isoline
  - B. isograd
  - C. isograde
  - D. facies

- 84. Which of the following is an ultramafic volcanic rock?
  - A. preridotite
  - B. dunite
  - C. tholeiitic basalt
  - D. komatiite
- 85. What is the characteristic petrographic feature of lamprophyres?
  - A. corona texture
  - B. layered structure
  - C. presence of olivine / pyroxene phenocrysts
  - D. presence of mica/ amphibole phenocrysts
- 86. What is the chief mineral in anorthosite?
  - A. anorthite
  - B. orthoclase
  - C. plagioclase
  - D. anorthoclase
- 87. The term kelphitic texture involves
  - A. corona with garnet or olivine
  - B. intergrowth of quartz and feldspar
  - C. rock melting
  - D. liquid immiscibility
- 88. Which of the following is a product of contact metamorphism?
  - A. charnockite
  - B. khondalite
  - C. hornfels
  - D. tektite
- 89. What is the common cause of origin of halite?
  - A. metamorphism
  - B. volcanism
  - C. sedimentation
  - D. evaporation

- 90. Name the material produced along faults by rock crushing
  - A. Pseudotachylite
  - B. mylonite
  - C. gouge
  - D. slickeside
- 91. Myrmekite is an intergrowth between
  - A. Quartz and orthoclase
  - B. Quartz and plagioclase
  - C. Biotite and hornblende
  - D. Olivine and pyroxene
- 92. What property of a sediment/sedimentary rock is indicated by the term 'sorting'?
  - A. Cementation
  - B. Compaction
  - C. Grain-size variation
  - D. Sphericity and roundness
- 93. Which is the correct order of increasing grade of metamorphism?
  - A. zeolite facies albite-epidote facies- hornblende-hornfels facies pyroxene hornfels facies
  - B. albite-epidote facies- hornblende-hornfels facies pyroxene-hornfels facies zeolite facies
  - C. albite-epidote facies- zeolite facies hornblende-hornfels facies pyroxene hornfels facies
  - D. zeolite facies albite-epidote facies pyroxene hornfels facies hornblende-hornfels facies
- 94. Which of the following is not likely a metapelite?
  - A. Chlorite schist
  - B. Muscovite- garnet schist
  - C. Cordierite gneiss
  - D. Khondalite

- 95. In the rocks of which geologic era the fossil graptolites occur ?
  - A. Paleozoic
  - B. Mesozoic
  - C. Cenozoic
  - D. Precambrian
- 96. What is the process of origin of skarn?
  - A. Metamorphism
  - B. Metasomatism
  - C. Evaporation
  - D. Diagenesis
- 97. Which of the following ores is chiefly mined from alluvial placers?
  - A. Monazite
  - B. Ilmenite
  - C. Cassiterite
  - D. Zircon
- 98. Which ore contribute maximum to the titanium production?
  - A. Titanite
  - B. Rutile
  - C. Ilmenite
  - D. Perovskite
- 99. Which of the following is stable at highest temperature?
  - A. Andalusite
  - B. Sillimanite
  - C. Kyanite
  - D. Staurolite
- 100. For which of these minerals the exploration is done based on its fluorescence property?
  - A. Nonazite
  - B. Uraninite
  - C. Scheelite
  - D. Diamond

- A. Tin
- B. Tungston
- C. Tantalum
- D. Platinum

102. With which type of rocks primary platinum ores are associated?

- A. Felsic rocks
- B. Aalkaline rocks
- C. Ultramafic rocks
- D. Intermediate rocks
- 103. What is the major constituent of tuff?
  - A. Microfossils
  - B. Skeletal remains
  - C. Volcanic ash
  - D. Large boulders
- 104. In describing the geometry of which structure we use the term 'hinge'?
  - A. Fold
  - B. Fault
  - C. Joint
  - D. Foliation
- 105. In which situation the plunge and pitch of a lineation will be of same amount?
  - A. If the plain containing the lineation is vertical
  - B. If the lineation is parallel to the dip of the plane containing it
  - C. If the lineation is at  $45^{\circ}$  to the dip of the plane
  - D. If the lineation is at  $45^{\circ}$  to the strike of the plane
- 106. What is the name given to a fold with inter-limb angle of  $25^{\circ}$ ?
  - A. Gentle
  - B. Open
  - C. Close
  - D. Tight

- 107. In which type of fold the limbs are parallel?
  - A. Parallel folds
  - B. Similar folds
  - C. Concentric folds
  - D. Isoclinal folds

108. Which is not a rock seen associated with a fault plane?

- A. Conglomerate
- B. Breccia
- C. Gouge
- D. Pseudotachylite
- 109. A plane is dipping  $45^{\circ}$  towards N  $60^{\circ}$  W? What is its hade?
  - A. 30°
  - B. 40°
  - C. 45°
  - D. 60°

110. What is the apparent dip towards NW direction for a plane dipping 14° towards north?

- A. 8°
- B. 10°
- C. 12°
- D. 16°
- 111. Where do you observe plumose structure?
  - A. Along ductile shears
  - B. Along axial planes of folds
  - C. Along joint surfaces
  - D. Along bedding planes in slate
- 112. Which rock is produced commonly seen along ductile shear zones?
  - A. Gouge
  - B. Cataclasite
  - C. Fault breccia
  - D. Mylonite

- 113. Which of the structures are seen along rift valleys?
  - A. Horst
  - B. Graben
  - C. Thrust
  - D. Duplex
- 114. Boudins can be classed as
  - A. planar structures
  - B. linear structures
  - C. folds
  - D. faults
- 115. What is the name of the unconformity separating older crystalline rocks and younger sedimentary rocks?
  - A. Angular unconformity
  - B. Disconformity
  - C. Nonconformity
  - D. Hiatus
- 116. What does a passive continental margin represent?
  - A. Divergent plate margin
  - B. Convergent plate margin
  - C. Conservative plate margin
  - D. Ancient rift
- 117. When did the break of the Gondwanaland started?
  - A. Late Carboniferous
  - B. Early Triassic
  - C. LateTriassic
  - D. Early Jurassic
- 118. Which of the following groups of the Vindhyans has associated diamondiferous conglomerates?
  - A. Semri
  - B. Rewa
  - C. Kaimur
  - D. Bhnader



- 119. Which of the following is not a Proterozoic basin?
  - A. Kaladgi
  - B. Chattisgargh
  - C. Pranhita-Godavari
  - D. Mannar

120. Which of the following conglomerates is damondiferous?

- A. Bengarapalle
- B. Tattekkrere
- C. Hiriyur
- D. Vengad
- 121. Which is the northern hemispheric counterpart of Gondwanaland?
  - A. Pangea
  - B. Rodinia
  - C. Laurasia
  - D. Panthalassa

122. What is the approximate number of trilobite species recognized so far?

- A. 2000
- B. 5000
- C. 10000
- D. 20000
- 123. To which phylum ammonoids belong to?
  - A. Protozoa
  - B. Coelentera
  - C. Mollusca
  - D. Arthropoda
- 124. To which phylum, the class 'Crustacea' belongs to?
  - A. Protozoa
  - B. Coelentera
  - C. Mollusca
  - D. Arthropoda

- 125. Which of the following is a hominid fossil?
  - A. Sivatherium
  - B. Brahmatherium
  - C. Ramapithecus
  - D. Stegodon
- 126. Which of the following is not an ammonoid?
  - A. Orthoceras
  - B. Phylloceras
  - C. Ceratites
  - D. Goniatites
- 127. What is the term denoting the contact between a septum with the inner surface of the shell-wall of a cephalopod?
  - A. Septal line
  - B. Siphuncle
  - C. Suture line
  - D. Shell line
- 128. The boundary between Pleogene and Neogene is around:
  - A. 13Ma
  - B. 23 Ma
  - C. 33 Ma
  - D. 43 Ma

129. Which of the following is the correct arrangement in terms decreasing geologic age?

- A. Kurnools Talchirs Quilon beds Siwaliks Karewas
- B. Talchirs Kurnools Quilon beds Siwaliks Karewas
- C. Kurnoolss Talchirs Quilon beds Karewas Siwaliks
- D. Kurnools Umia beds Talchirs Siwaliks Karewas
- 130. The floral assemblage in a geological unit includes
  - A. all plant and animal fossil
  - B. plant fossils alone
  - C. animal fossils alone
  - D. spores and pollens alone

## 131. What kind of fossils the Gondwana sediments contain?

- A. Plant fossils only
- B. Plant and animal fossils
- C. Animal fossils only
- D. No fossils
- 132. Which of the following was formed essentially in fresh water environment?
  - A. Cudduppahs
  - B. Vindhyans
  - C. Dharwars
  - D. Siwaliks
- 133. What do you mean by the term para-amphibolite?
  - A. Parent rock of an amphibolite
  - B. Amphibolite derived from igneous rock
  - C. Amphibolite derived from sedimentary rock
  - D. Amphibolite with paragonite
- 134. Which of the magmatic series show iron enrichment in the intermediate members?
  - A. Tholeiitic
  - B. Calc-alkali
  - C. Alkali
  - D. Transitional
- 135. Who introduced the concept of silica-saturation in igneous rocks?
  - A. N.L.Bowen
  - B. G.W.Tyrell
  - C. S.J.Shand
  - D. I.S.Carmichael
- 136. Which of the following is a hypermelanic rock?
  - A. Anorthosite
  - B. Amphibolite
  - C. Dunite
  - D. Carbonatite

- 137. Which of these is geologically the youngest geomorphic feature?
  - A. Himalayas
  - B. Aravallis
  - C. Vindhyans
  - D. Easternghats
- 138. To which group the mineral pigeonite belongs to?
  - A. Olivine
  - B. Pyroxene
  - C. Amphibole
  - D. Mica
- 139. To which family the rock 'shonkinite' belongs to?
  - A. Granite
  - B. Diorite
  - C. Gabbro
  - D. Syenite
- 140. Dolomitic limestone differs from limestone in having
  - A. more Ca
  - B. more Mg
  - C. more Mn
  - D. more Si
- 141. What is the colour generally shown by the mineral amethyst?
  - A. Brown
  - B. Green
  - C. Red
  - D. Violet
- 142. Which of the following exhibits silky lustre?
  - A. Corundum
  - B. Diamond
  - C. Chrysotile
  - D. Opal

143. Which of the following is not a monomineralic rock?

- A. Anorthosite
- B. Amphibolite
- C. Albitite
- D. Dunite

144. To which of these the term CIPW is associated with?

- A. Ground water quality
- B. Metamorphic facies
- C. Chemistry of igneous rocks
- D. Diagenesis of sedimentary rocks
- 145. Which of the following represents longest duration?
  - A. Archean
  - B. Proterozoic
  - C. Paleozoic
  - D. Phanerozoic
- 146. In which rock nepheline is commonly seen?
  - A. Granite
  - B. Diorite
  - C. Gabbro
  - D. Syenite

147. What does the term Paleoproterozoic represent?

- A. Before Proterozoic
- B. Between Paleozoic and Proterozoic
- C. Early Proterozoic
- D. Late Proterozoic
- 148. When did the most of the banded iron formations form?
  - A. Archean
  - B. Proterozoic
  - C. Paleozoic
  - D. Mesozoic

149. How thick are the Siwalik sediments?

- A. 1 km
- B. 3 km
- C. 5km
- D. 7 km

150. Match the names of geologists with their fields study.

- 1. Bowen a. Economic Geology
- 2. Ramsay b. Metamorphic Petrology
- 3. Eskola c. Structural Geology
- 4. Pettijohn d. Sedimentary Petrology
- 5. Lindgren e. Igneous Petrology
- A. 1e-2c-3b-4d-5a
- B. 1a-2c-3e-4d-5b
- C. 1c-2b-3a-4e-5b
- D. 1e-2b-3c-4d-5a