## **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