PART 06 — EARTH SCIENCES

(Answer ALL questions)

The margins at which the plates neither gain nor lose surface area are called

- 1. Continental margins
- 2. Destructive margins
- 3. Conservative margins
- 4. None of the above
- 77. Geosynclines located on the tectonically stable margins of the continents are referred as
 - 1. Paralia-geosynclines
 - 2. Mio-geosynclines
 - Exo-geosynclines
 - 4. Eugeosynclines
- 78. A network of parallel or sub-parallel streams developed along strike and dip direction is known as
 - 1. Resequent
 - 2. Trellis
 - 3. Dendritic
 - 4. Pinnate
- 79. The Hawaiian islands are examples of
 - 1. Transform fault
 - 2. Fissure eruption
 - 3. Interplate volcanoes
 - 4. Intra volcanic chain
- Part of the sea floor adjoining a landmass is known as
 - 1. Continental shelf
 - 2. Continental slope
 - 3. Beach
 - 4. Continental rise
- 81. The crustal model of isostasy was proposed by
 - 1. Washington and Clark
 - 2. Wegener
 - 3. Jacob
 - 4. Sir George Airy
- 82. Higher roundness of grains indicates
 - 1. Degree of Weathering
 - 2. Longer distance of transport
 - 3. Maturity of sediment
 - 4. Shorter distance of transport

- 83. Amphibolite Schist is a rock associated with
 - 1. Tin
 - 2. Gold
 - 3. Copper
 - 4. Aluminium
- 84. Which among the following is the first to crystallize on cooling?
 - 1. Quartz
 - 2. Feldspar
 - 3. Olivine
 - 4. Mica
- 85. Diamonds are usually associated with
 - 1. Granite
 - 2. Sandstone
 - 3. Dolerite
 - 4. Kimberlite
- 86. Leucocratic rocks are
 - 1. Dark coloured
 - 2. Medium grey coloured
 - 3. Light grey coloured
 - 4. Medium to dark grey coloured
- 87. Dolerite is a rock that possesses
 - 1. Porphyro-blastic texture
 - 2. Granitic texture
 - 3. Vesicular texture
 - 4. Ophitic texture
- 88. Joints that are perpendicular to fold axes and having steep dips are called
 - 1. Release joints
 - 2. Extension joints
 - 3. Shear joints
 - 4. None of the above
- 89. Petrofabric diagram occurring as girdle will represent
 - 1. B-Tectonite
 - 2. R-Tectonite
 - 3. S-Tectonite
 - 4. Both (1) and (2)

- 90. Dome and basin structures are characteristic of
 - 1. Type I interference pattern
 - 2. Type II interference pattern
 - 3. Type III interference pattern
 - 4. None of the above
- 91. The ratio of transverse strain to axial strain is called
 - 1. Compressibility
 - 2. Poisson's ratio
 - 3. Modulus of Elasticity
 - 4. Breaking strength
- 92. A group of beds which are able to lift their own weight and that of overlying rock strata without much internal flowage is called
 - 1. Incompetent beds
 - 2. Ductile material
 - 3. Competent beds
 - 4. Rheid
- 93. The hingeline of a doubly plunging fold will be
 - 1. Curvilinear
 - 2. Horizontal
 - 3. Rectilinear
 - 4. None of the above
- 94. The host rocks for banded iron formation are
 - 1. Quartzites
 - Dolerite
 - 3. Granite
 - 4. Schist
- 95. Fluorspar deposits at Amba Dongar are associated with
 - 1. Granites
 - 2. Carbonatites
 - 3. Phyllites
 - 4. Marbles
- 96. Bauxite mining in India is mainly done in
 - 1. Deccan traps
 - 2. Lateritic terrains
 - 3. Phyllites
 - 4. Granites

- 97. Blue Quartz veins are of special value in searching for
 - 1. Gold
 - 2. Silver
 - 3. Lead
 - 4. Zinc
- 98. The metallic mineral known to be a good conductor of electricity is
 - 1. Hematite
 - 2. Chromite
 - 3. Braunite
 - 4. Galena
- 99. In cavity filling deposits, the ore is built up in successive layers called
 - 1. Vugs
 - 2. Geode
 - 3. Druse
 - 4. Crustification
- 100. The geophysical technique in which the fields measured are not stationary but vary with time is
 - 1. Electrical
 - 2. Magnetic
 - 3. Gravity
 - 4. Seismic
- 101. Overbreak is a term associated with
 - 1. Construction of dams
 - 2. Tunneling operation
 - 3. Bridge construction
 - 4. Drilling bore wells
- 102. Idukki dam in Kerala is an example of
 - 1. Masonry dam
 - 2. Arch dam
 - 3. Gravity dam
 - 4. Embankment dam
- 103. Well diameter and mud content of the walls of a well can be measured by
 - 1. Caliper logging
 - 2. Neutron logging
 - 3. Photoelectric logging
 - 4. Electrical logging

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- 104. The geophysical method that can successfully locate copper, lead and zinc deposits is
 - 1. Seismic method
 - 2. Magnetic method
 - 3. Gravity method
 - 4. Airborne electromagnetic method
- 105. Airborne magnetometry, used to locate magnetic minerals can be effective upto a depth of
 - 1. 600 to 800 metres
 - 2. 400 to 600 metres
 - 3. 1000 to 1200 metres
 - 4. 200 to 400 metres
- 106. The fastest method of drilling for groundwater is
 - 1. Cable tool method
 - 2. Hydraulic rotary method
 - 3. Boring method
 - 4. None of the above
- 107. In an unconsolidated aquifer, where the water table is at shallow depth, the suitable well would be
 - 1. Dug well
 - 2. Driven well
 - 3. Bored well
 - 4. Jetted well
- 108. Water of magmatic origin is known as
 - 1. Meteoric water
 - 2. Capillary water
 - 3. Connate water
 - 4. Juvenile water
- 109. Recharge area is that region which
 - 1. Supplies water to perched aquifer
 - 2. Supplies water to unconfined aquifer
 - 3. Receives water from confined aquifer
 - 4. Supplies water to confined aquifer

- 110. The coefficient of permeability (T) is expressed as
 - 1. $T = \frac{b}{k}$
 - 2. T = QA
 - 3. T = Kb
 - 4. None of the above
- 111. Which one of the following has the highest porosity?
 - 1. Limestone
 - 2. Sandstone
 - 3. Clay
 - 4. Gravel
- 112. The water stored and released after flood is called as
 - 1. S ecific retention
 - 2. Specific yield
 - 3. Flood yield
 - 4. Bank storage
- 113. Specific retention may be expressed as

$$1. \qquad S_r = \frac{Y}{100 \,\mathrm{W}}$$

$$2. S_r = \frac{100W}{Y}$$

$$S_r = \frac{V}{100W_r}$$

$$4. \qquad S_r = \frac{100W_r}{V}$$

- 114. Water containing less than 1 gm of salts per kilogram of water is classified as
 - 1. Hot water
 - 2. Salt water
 - 3. Cold water
 - 4. Fresh water
- 115. The relationship between fresh and saline water can be understood by
 - 1. Hill's method
 - 2. Ghyben-Herzberg principle
 - 3. Darcy's law
 - 4. Reynold's number