

DU MSc Geology

Topic:- GEO MSC S2

1) Most minerals melt to form a liquid of the same composition as the solid. The process is called

[Question ID = 2041]

1. Incongruent melting [Option ID = 8158]
2. Congruent melting [Option ID = 8159]
3. Fractional melting [Option ID = 8160]
4. Fractional crystallization [Option ID = 8161]

Correct Answer :-

- Congruent melting [Option ID = 8159]

2) A concordant intrusive body with a flat base and domed mushroom shaped roof is called

[Question ID = 2042]

1. Dyke [Option ID = 8162]
2. Laccolith [Option ID = 8163]
3. Lopolith [Option ID = 8164]
4. Batholith [Option ID = 8165]

Correct Answer :-

- Laccolith [Option ID = 8163]

3) Widmanstätten exsolution pattern is common in

[Question ID = 2043]

1. Iron meteorites [Option ID = 8166]
2. Chondrites [Option ID = 8167]
3. Stony iron meteorites [Option ID = 8168]
4. Basalts [Option ID = 8169]

Correct Answer :-

- Iron meteorites [Option ID = 8166]

4) Soret Effect is a term associated with

[Question ID = 2044]

1. Viscosity [Option ID = 8170]
2. Diffusion [Option ID = 8171]
3. Melting [Option ID = 8172]
4. Buoyancy [Option ID = 8173]

Correct Answer :-

- Diffusion [Option ID = 8171]

5) During crystallization of a melt plagioclase become richer in

[Question ID = 2045]

1. Sr [Option ID = 8174]
2. Na [Option ID = 8175]
3. Ca [Option ID = 8176]
4. Ba [Option ID = 8177]

Correct Answer :-

- Na [Option ID = 8175]

6) What is the most dominant rock type of Deccan traps?

[Question ID = 2046]

1. volcanic tuff [Option ID = 8178]
2. basalts [Option ID = 8179]
3. Bole bed [Option ID = 8180]
4. rhyolite [Option ID = 8181]

Correct Answer :-

- basalts [Option ID = 8179]

7) What is the effect of water on mineral-melting at a given pressure?

[Question ID = 2047]

1. Water lowers melting temperature
[Option ID = 8182]

2. Water raises the melting temperature

[Option ID = 8183]

3. Does not affect melting temperature

[Option ID = 8184]

4. None of these

[Option ID = 8185]

Correct Answer :-

- Water lowers melting temperature

[Option ID = 8182]

8) Which of the following Nesosilicates is a common constituent of basalt?

[Question ID = 2048]

1. Garnet [Option ID = 8186]

2. Olivine [Option ID = 8187]

3. Silimanite [Option ID = 8188]

4. Zircon [Option ID = 8189]

Correct Answer :-

- Garnet [Option ID = 8186]

9) The acute bisectrix figure is observed on a crystal plate

[Question ID = 2049]

1. Cut normal to obtuse bisectrix [Option ID = 8190]

2. Cut normal to acute bisectrix [Option ID = 8191]

3. Cut parallel to optic axes [Option ID = 8192]

4. Cut parallel to acute bisectrix [Option ID = 8193]

Correct Answer :-

- Cut normal to acute bisectrix [Option ID = 8191]

10) Jadeite is a type of

[Question ID = 2050]

1. Olivine [Option ID = 8194]

2. Mica [Option ID = 8195]

3. Pyroxene [Option ID = 8196]

4. Amphibole [Option ID = 8197]

Correct Answer :-

- Pyroxene [Option ID = 8196]

11) If in a deforming rock body, stress is found to be proportional to strain rate, the material (rock) behaviour is called

[Question ID = 2051]

1. Elastic [Option ID = 8198]

2. Plastic [Option ID = 8199]

3. Elastico-viscous [Option ID = 8200]

4. Viscous [Option ID = 8201]

Correct Answer :-

- Viscous [Option ID = 8201]

12) If a stretching lineation is found on a cleavage plane, the direction of maximum shortening is likely to be:

[Question ID = 2052]

1. Parallel to the lineation, on the cleavage plane [Option ID = 8202]

2. Perpendicular to the lineation, on the cleavage plane [Option ID = 8203]

3. Perpendicular to the cleavage, parallel to the lineation [Option ID = 8204]

4. Perpendicular to both the cleavage plane and the lineation. [Option ID = 8205]

Correct Answer :-

- Perpendicular to both the cleavage plane and the lineation. [Option ID = 8205]

13) A rock shows very well developed foliation, but no distinct lineation (S-tectonite). The type of strain most likely representative of the deformation is

[Question ID = 2053]

1. Pure flattening [Option ID = 8206]

2. General flattening [Option ID = 8207]

3. Plane strain [Option ID = 8208]

4. Pure constriction. [Option ID = 8209]

Correct Answer :-

- Pure flattening [Option ID = 8206]

14) According to Anderson's theory of faulting, the principal stress axis σ_1 (maximum compressive stress) should be vertical.



during:

[Question ID = 2054]

1. Strike-slip faulting [Option ID = 8210]
2. Normal faulting [Option ID = 8211]
3. Reverse faulting [Option ID = 8212]
4. Wrench faulting. [Option ID = 8213]

Correct Answer :-

- Normal faulting [Option ID = 8211]

15) A fault plane strikes N-S and dips 70° E. On the fault plane, the slickenside lineations show a pitch of 65° northerly. Which of the following interpretations is correct?

[Question ID = 2055]

1. It is an oblique-slip reverse fault with sinistral sense wrench component
[Option ID = 8214]
2. It is an oblique-slip normal fault with sinistral sense wrench component
[Option ID = 8215]
3. It is an oblique slip normal fault with a dextral sense wrench component
[Option ID = 8216]
4. It is a strike-slip fault with sinistral wrench component.
[Option ID = 8217]

Correct Answer :-

- It is an oblique-slip normal fault with sinistral sense wrench component
[Option ID = 8215]

16) Humans dispersed out from ----- center of origin

[Question ID = 2056]

1. African [Option ID = 8218]
2. Asian [Option ID = 8219]
3. European [Option ID = 8220]
4. American. [Option ID = 8221]

Correct Answer :-

- African [Option ID = 8218]

17) *Glossopteris* became less diverse in

[Question ID = 2057]

1. Permian
[Option ID = 8222]
2. Cretaceous
[Option ID = 8223]
3. Triassic
[Option ID = 8224]
4. Jurassic
[Option ID = 8225]

Correct Answer :-

- Triassic
[Option ID = 8224]

18) Mesozoic reefs are formed primarily by

[Question ID = 2058]

1. Sponges
[Option ID = 8226]
2. Archaeocyathids
[Option ID = 8227]
3. Rugose corals
[Option ID = 8228]
4. Scleractinian corals
[Option ID = 8229]

Correct Answer :-

- Scleractinian corals

[Option ID = 8229]

19) A taxon that disappears for one or more periods from the fossil record, and reappears later is called as

[Question ID = 2059]

1. Zombie taxon [Option ID = 8230]
2. Ghost taxon [Option ID = 8231]
3. Elvis taxon [Option ID = 8232]
4. Lazarus taxon [Option ID = 8233]

Correct Answer :-

- Lazarus taxon [Option ID = 8233]

20) Pascichnia is term used for

[Question ID = 2060]

1. Grazing traces [Option ID = 8234]
2. Crawling traces [Option ID = 8235]
3. Resting traces [Option ID = 8236]
4. Dwelling traces [Option ID = 8237]

Correct Answer :-

- Grazing traces [Option ID = 8234]

21) When an organism achieves sexual maturity as a juvenile, the heterochronic change is termed as

[Question ID = 2061]

1. Pedomorphosis
[Option ID = 8238]
2. Peramorphosis
[Option ID = 8239]
3. Atavism
[Option ID = 8240]
4. None of these
[Option ID = 8241]

Correct Answer :-

- Pedomorphosis
[Option ID = 8238]

22) Hyalophane is a

[Question ID = 2062]

1. Mica [Option ID = 8242]
2. Feldspar [Option ID = 8243]
3. Feldspathoid [Option ID = 8244]
4. Amphibole [Option ID = 8245]

Correct Answer :-

- Feldspar [Option ID = 8243]

23) Choose the correct option from the following:

[Question ID = 2063]

1. Parallelism of internal and external schistosity implies syn-deformation growth of porphyroblast [Option ID = 8246]
2. Poikilitic texture is a metamorphic texture [Option ID = 8247]
3. Antiperthite is an exsolution texture [Option ID = 8248]
4. Granofels are associated with regional metamorphism [Option ID = 8249]

Correct Answer :-

- Antiperthite is an exsolution texture [Option ID = 8248]

24) Which amongst the following is a 1:1 phyllosilicate?

[Question ID = 2064]

1. Illite
[Option ID = 8250]
2. Kaolinite
[Option ID = 8251]
3. Montmorillonite
[Option ID = 8252]
4. Chlorite
[Option ID = 8253]

Correct Answer :-

- Kaolinite

[Option ID = 8251]

25) Closest packing of equal sized spheres of cations and anions will lead to coordination number of

[Question ID = 2065]

1. 6 [Option ID = 8254]
2. 12 [Option ID = 8255]
3. 4 [Option ID = 8256]
4. 8 [Option ID = 8257]

Correct Answer :-

- 12 [Option ID = 8255]

26) Monticellite is a

[Question ID = 2066]

1. Single chain silicate [Option ID = 8258]
2. Nesosilicate [Option ID = 8259]
3. Double chain silicate [Option ID = 8260]
4. Tectosilicate [Option ID = 8261]

Correct Answer :-

- Nesosilicate [Option ID = 8259]

27) Khetri copper belt is part of

[Question ID = 2067]

1. South Delhi Fold Belt [Option ID = 8262]
2. Aravalli Supergroup [Option ID = 8263]
3. North Delhi Fold Belt [Option ID = 8264]
4. Marwar Group [Option ID = 8265]

Correct Answer :-

- Aravalli Supergroup [Option ID = 8263]

28) Abukama facies series is a

[Question ID = 2068]

1. High P-low T series
[Option ID = 8266]
2. Low P-high T series
[Option ID = 8267]
3. Intermediate PT series
[Option ID = 8268]
4. None of these
[Option ID = 8269]

Correct Answer :-

- Low P-high T series
[Option ID = 8267]

29) Reaction "cummingtonite = orthopyroxene+quartz+H₂O" indicates that

[Question ID = 2069]

1. It is a hydration reaction [Option ID = 8270]
2. It is an ion-exchange reaction [Option ID = 8271]
3. Cummingtonite has high alumina content [Option ID = 8272]
4. Cummingtonite contains low to no alumina [Option ID = 8273]

Correct Answer :-

- Cummingtonite contains low to no alumina [Option ID = 8273]

30) When all four oxygens in silicon tetrahedral are shared, the structure is known as

[Question ID = 2070]

1. Chain silicates [Option ID = 8274]
2. Ring silicates [Option ID = 8275]
3. Framework silicates [Option ID = 8276]
4. Cyclosilicates [Option ID = 8277]

Correct Answer :-

- Framework silicates [Option ID = 8276]



31) In AFM diagrams, pseudocomponent A is calculated as $A=Al_2O_3-3K_2O$. This is because minerals in this diagram are projected from

[Question ID = 2071]

1. Muscovite [Option ID = 8278]
2. Quartz [Option ID = 8279]
3. Biotite [Option ID = 8280]
4. K feldspar [Option ID = 8281]

Correct Answer :-

- Muscovite [Option ID = 8278]

32) The main reason for seasons is

[Question ID = 2072]

1. The Sun gets hotter and colder [Option ID = 8282]
2. Variable positions of moon with respect to Sun and Earth [Option ID = 8283]
3. The tilt of the Earth's axis [Option ID = 8284]
4. The variable distance between Sun and Earth [Option ID = 8285]

Correct Answer :-

- The tilt of the Earth's axis [Option ID = 8284]

33) Knob and kettle topography forms when

[Question ID = 2073]

1. Blocks of ice get buried by till, and then melt. [Option ID = 8286]
2. The glacier flows over sediment and molds it into streamlined hills. [Option ID = 8287]
3. Ice plucks chunks off of bedrock and leaves an indentation. [Option ID = 8288]
4. Rocks embedded in the base of the glacier gouge out deep depressions into bedrock [Option ID = 8289]

Correct Answer :-

- Blocks of ice get buried by till, and then melt. [Option ID = 8286]

34) The sluggish wind system in the equatorial areas is known as?

[Question ID = 2074]

1. Westerlies [Option ID = 8290]
2. Trades [Option ID = 8291]
3. Doldrums [Option ID = 8292]
4. Monsoon [Option ID = 8293]

Correct Answer :-

- Doldrums [Option ID = 8292]

35) The Digboi Oil Field is associated with rocks of

[Question ID = 2077]

1. Eocene age [Option ID = 8300]
2. Miocene age [Option ID = 8302]
3. Pleistocene age [Option ID = 8303]
4. Pliocene age [Option ID = 8305]

Correct Answer :-

- Miocene age [Option ID = 8302]

36) The Ninety East Ridge is present in which of the following oceans

[Question ID = 2078]

1. Atlantic [Option ID = 8306]
2. Indian [Option ID = 8308]
3. Pacific [Option ID = 8310]
4. Arctic [Option ID = 8311]

Correct Answer :-

- Indian [Option ID = 8308]

37) What are ophiolite suites?

[Question ID = 2080]

1. Fragments of oceanic lithosphere emplaced on a continent [Option ID = 8314]
2. Groups of seafloor magnetic anomalies [Option ID = 8315]
3. Wedge-shaped packages of sediments that form at passive margins [Option ID = 8317]
4. Rocks with ophitic texture [Option ID = 8318]

Correct Answer :-

- Fragments of oceanic lithosphere emplaced on a continent [Option ID = 8314]

38) Which of the following deep sea sediments is often part of ophiolite suites

[Question ID = 2083]

1. Nanno-Foram Ooze

[Option ID = 8322]

2. Globigerina ooze

[Option ID = 8325]

3. Radiolarian chert

[Option ID = 8327]

4. Pteropod ooze

[Option ID = 8329]

Correct Answer :-

- Radiolarian chert

[Option ID = 8327]

39) When does the Intertropical convergence Zone reach its most northerly location?

[Question ID = 2084]

1. July [Option ID = 8330]

2. April [Option ID = 8332]

3. January [Option ID = 8334]

4. October [Option ID = 8336]

Correct Answer :-

- July [Option ID = 8330]

40) Ocean acidification is gradually increasing with time as a result of

[Question ID = 2087]

1. Photosynthesis [Option ID = 8340]

2. Increasing pollution [Option ID = 8343]

3. Upwelling [Option ID = 8344]

4. Increasing atmospheric CO₂ concentrations [Option ID = 8345]

Correct Answer :-

- Increasing atmospheric CO₂ concentrations [Option ID = 8345]

41) The Ice-rafted debris-rich layers in the North Atlantic during Quaternary are referred to

[Question ID = 2088]

1. ENSO events

[Option ID = 8346]

2. Monsoonal events

[Option ID = 8347]

3. Heinrich events

[Option ID = 8349]

4. Interstadial events

[Option ID = 8351]

Correct Answer :-

- Heinrich events

[Option ID = 8349]

42) Because of difference in density, Icebergs float for a distance of several kilometers in sea before its gets completely melted. The difference in density between ice formed of pure water and sea water is

[Question ID = 2090]

1. 0.005 gm/cc

[Option ID = 8354]

2. 0.105 gm/cc

[Option ID = 8356]

3. 01.05 gm/cc

[Option ID = 8358]

4. 0.015 gm/cc

[Option ID = 8359]

Correct Answer :-

- 0.105 gm/cc

[Option ID = 8356]

43) In cumulative percentage probability curve a well-sorted sandstone will plot as

[Question ID = 2093]

1. A sigmoidal curve [Option ID = 8363]
2. A low gradient straight line [Option ID = 8365]
3. A high-gradient straight line [Option ID = 8367]
4. A bell-shaped curve [Option ID = 8368]

Correct Answer :-

- A high-gradient straight line [Option ID = 8367]

44) Sandy coastline with an extensive area of beach directly adjacent to the coastal plain is termed a

[Question ID = 2094]

1. Shoreface [Option ID = 8370]
2. Chenier [Option ID = 8371]
3. Foreshore [Option ID = 8372]
4. Strand plain [Option ID = 8374]

Correct Answer :-

- Strand plain [Option ID = 8374]

45) We get botryoidal cement geometry in carbonate that has gone through

[Question ID = 2096]

1. Vadose diagenesis [Option ID = 8378]
2. Deep burial diagenesis [Option ID = 8379]
3. Phreatic diagenesis [Option ID = 8380]
4. Sea floor diagenesis [Option ID = 8381]

Correct Answer :-

- Sea floor diagenesis [Option ID = 8381]

46) We get grain flows commonly in

[Question ID = 2097]

1. Moderately sorted granular sediments [Option ID = 8382]
2. Ill sorted granular sediments [Option ID = 8383]
3. Well sorted granular sediments [Option ID = 8384]
4. Clayey sediments [Option ID = 8385]

Correct Answer :-

- Well sorted granular sediments [Option ID = 8384]

47) If 'F' represents direction of Earth's magnetic field at any station, the local magnetic meridian at that station will be

[Question ID = 2098]

1. A plane assuming an angle between 'F' and its horizontal projection 'H' [Option ID = 8386]
2. A vertical plane passing through 'F' and its horizontal projection 'H' [Option ID = 8387]
3. A plane that holds 'F' [Option ID = 8388]
4. A plane that passes through 'F' and magnetic north of the Earth [Option ID = 8389]

Correct Answer :-

- A vertical plane passing through 'F' and its horizontal projection 'H' [Option ID = 8387]

48) We call a flow 'in phase' flow when

[Question ID = 2099]

1. Reynold number of flow is >2000
[Option ID = 8390]
2. Reynold number of flow is <2000
[Option ID = 8391]
3. Froud number of flow is <1
[Option ID = 8392]
4. Froud number of flow is >1
[Option ID = 8393]

Correct Answer :-

- Froud number of flow is >1
[Option ID = 8393]

49) We can expect forearc sandstones as

[Question ID = 2100]

1. Quatrrose in nature [Option ID = 8394]
2. Quartzofeldspathic in nature [Option ID = 8395]
3. Quartzolithic in nature [Option ID = 8396]
4. Feldspathic in nature [Option ID = 8397]

Correct Answer :-

- Quartzolitic in nature [Option ID = 8396]

50) In Jodhpur, Rajasthan exposures of Jodhpur Sandstones are found overlying the Malani rhyolite. The contact between the two can be best described as

[Question ID = 2101]

1. Nonconformity [Option ID = 8398]
2. Paraconformity [Option ID = 8399]
3. Disconformity [Option ID = 8400]
4. Angular unconformity [Option ID = 8401]

Correct Answer :-

- Nonconformity [Option ID = 8398]

51) ----- are intrabed soft sediment deformation features

[Question ID = 2102]

1. Convolute lamination and overturned cross-stratification [Option ID = 8402]
2. Load cast and convolute lamination [Option ID = 8403]
3. Flame structure and overturned cross-stratification [Option ID = 8404]
4. Load cast and Flame structure [Option ID = 8405]

Correct Answer :-

- Convolute lamination and overturned cross-stratification [Option ID = 8402]

52) When streams appear to be far too small with respect to their valley, they are called as

[Question ID = 2103]

1. Paleochannel [Option ID = 8406]
2. Inland stream [Option ID = 8407]
3. Misfit stream [Option ID = 8408]
4. Seasonal stream [Option ID = 8409]

Correct Answer :-

- Misfit stream [Option ID = 8408]

53) Fracturing of the ground by thermal contraction at sub-freezing temperature is called as

[Question ID = 2104]

1. Fracking [Option ID = 8410]
2. Desiccation cracking [Option ID = 8411]
3. Frost cracking [Option ID = 8412]
4. Dilation cracking [Option ID = 8413]

Correct Answer :-

- Frost cracking [Option ID = 8412]

54) Which of the following features could help you identify the presence of glaciers in a region in the past?

[Question ID = 2105]

1. Chatter marks
[Option ID = 8414]
2. Terminal moraine
[Option ID = 8415]
3. Drumlins
[Option ID = 8416]
4. All of these
[Option ID = 8417]

Correct Answer :-

- All of these
[Option ID = 8417]

55) Which of the following statements is true?

[Question ID = 2106]

1. Sand has higher porosity than clay
[Option ID = 8418]
2. Mud has higher porosity than sand
[Option ID = 8419]
3. Mud has higher permeability than sand
[Option ID = 8420]
4. None of these

[Option ID = 8421]

Correct Answer :-

- Mud has higher permeability than sand

[Option ID = 8420]

56) The increase in velocity leads to a drop in pressure above the grain and is known as the

[Question ID = 2107]

1. Bernoulli effect [Option ID = 8422]
2. Stokes effect [Option ID = 8423]
3. Chezy's effect [Option ID = 8424]
4. Mannings effect [Option ID = 8425]

Correct Answer :-

- Bernoulli effect [Option ID = 8422]

57) Darcy law states that

[Question ID = 2108]

1. Velocity is inversely proportional to hydraulic gradient [Option ID = 8426]
2. Velocity is directly proportional to hydraulic gradient [Option ID = 8427]
3. Velocity is not related to the hydraulic gradient [Option ID = 8428]
4. Velocity is proportional to specific yield [Option ID = 8429]

Correct Answer :-

- Velocity is directly proportional to hydraulic gradient [Option ID = 8427]

58) In which environment will you find maximum soil thickness?

[Question ID = 2109]

1. Temperate
[Option ID = 8430]
2. Semi-arid
[Option ID = 8431]
3. Tropical
[Option ID = 8432]
4. None of these
[Option ID = 8433]

Correct Answer :-

- Tropical

[Option ID = 8432]

59) UTM in GIS stands for

[Question ID = 2110]

1. Universal Transverse Mercator
[Option ID = 8434]
2. Unclassified Thematic Map
[Option ID = 8435]
3. Universal Tasseled Map
[Option ID = 8436]
4. None of these
[Option ID = 8437]

Correct Answer :-

- Universal Transverse Mercator

[Option ID = 8434]

60) The dimension of Storativity is

[Question ID = 2111]

1. LT^{-1} [Option ID = 8438]
2. L^2T^{-1} [Option ID = 8439]
3. L^3T^{-1} [Option ID = 8440]
4. Dimensionless [Option ID = 8441]

Correct Answer :-

- Dimensionless [Option ID = 8441]

61) Which of the following is an erosional glacial landscape?

[Question ID = 2112]

1. Kames [Option ID = 8442]
2. Moraines [Option ID = 8443]
3. Esker [Option ID = 8444]
4. Arête [Option ID = 8445]

Correct Answer :-

- Arête [Option ID = 8445]

62) The Ediacaran fossils are characterized by

[Question ID = 2113]

1. Colony of unicellular organism [Option ID = 8446]
2. Small Shelly fauna [Option ID = 8447]
3. Multi-cellular metazoans [Option ID = 8448]
4. Stromatolite colony [Option ID = 8449]

Correct Answer :-

- Multi-cellular metazoans [Option ID = 8448]

63) Bijli rhyolite is associated with

[Question ID = 2114]

1. Singhbhum craton [Option ID = 8450]
2. Bastar craton [Option ID = 8451]
3. Dharwar craton [Option ID = 8452]
4. Aravalli craton [Option ID = 8453]

Correct Answer :-

- Bastar craton [Option ID = 8451]

64) Best quality of Indian coking coal is produced from:

[Question ID = 2115]

1. Jharia coalfield [Option ID = 8454]
2. Bokaro coalfield [Option ID = 8455]
3. Raniganj coalfield [Option ID = 8456]
4. Jabalpur coalfield [Option ID = 8457]

Correct Answer :-

- Raniganj coalfield [Option ID = 8456]

65) Graptolites disappeared at the end of:

[Question ID = 2116]

1. Cambrian [Option ID = 8458]
2. Silurian [Option ID = 8459]
3. Ordovician [Option ID = 8460]
4. Carboniferous [Option ID = 8461]

Correct Answer :-

- Silurian [Option ID = 8459]

66) Taphonomy is the science dealing with

[Question ID = 2117]

1. Study of the conditions of burial of fossils [Option ID = 8462]
2. Reconstruction of paleoenvironment by means of fossils [Option ID = 8463]
3. Mode of preservation of fossils [Option ID = 8464]
4. Study of fossil spore and pollens [Option ID = 8465]

Correct Answer :-

- Mode of preservation of fossils [Option ID = 8464]

67) Which of the following biostratigraphic zone shows time correlative plane?

[Question ID = 2118]

1. Acme biozone [Option ID = 8466]
2. Interval biozone [Option ID = 8467]
3. Lineage biozone [Option ID = 8468]
4. Assemblage biozone [Option ID = 8469]

Correct Answer :-

- Lineage biozone [Option ID = 8468]

68) A disconformity indicates

[Question ID = 2119]

1. A rock unit that does not contain fossils [Option ID = 8470]
2. An erosional surface between igneous and metamorphic rocks [Option ID = 8471]
3. An erosional surface between different rock types [Option ID = 8472]

4. An erosional surface between horizontal sedimentary rocks [Option ID = 8473]

Correct Answer :-

- An erosional surface between horizontal sedimentary rocks [Option ID = 8473]

69) First leaves and flowers appeared during

[Question ID = 2120]

1. Early Cretaceous [Option ID = 8474]
2. Early Jurassic [Option ID = 8475]
3. Late Cretaceous [Option ID = 8476]
4. Late Triassic [Option ID = 8477]

Correct Answer :-

- Late Cretaceous [Option ID = 8476]

70) Stratigraphic succession in Deccan trap is erected with the help of

[Question ID = 2121]

1. Giant plagioclase laths in basalt
[Option ID = 8478]
2. Inter-trappean and bole beds
[Option ID = 8479]
3. Magnetic reversal record in basalt
[Option ID = 8480]
4. All of these
[Option ID = 8481]

Correct Answer :-

- All of these

[Option ID = 8481]

71) An influent stream has

[Question ID = 2122]

1. Water in the stream at higher elevation than water table elevation [Option ID = 8482]
2. Water in the stream at lower elevation than water table elevation [Option ID = 8483]
3. Water in the stream at equal elevation to the water table elevation [Option ID = 8484]
4. No water flows on either side [Option ID = 8485]

Correct Answer :-

- Water in the stream at higher elevation than water table elevation [Option ID = 8482]

72) The ~30 % of the sedimentary shell of Earth is marked by

[Question ID = 2123]

1. Shale [Option ID = 8486]
2. Sandstone [Option ID = 8487]
3. Conglomerate [Option ID = 8488]
4. Limestone [Option ID = 8489]

Correct Answer :-

- Sandstone [Option ID = 8487]

73) The incipient stage weathering is marked by

[Question ID = 2124]

1. Smectite-Vermiculite
[Option ID = 8490]
2. Illite-Chlorite
[Option ID = 8491]
3. Illite-Kaolinite
[Option ID = 8492]
4. Kaolinite-chlorite
[Option ID = 8493]

Correct Answer :-

- Smectite-Vermiculite

[Option ID = 8490]

74) Which of the following bedforms represents upstream migration?

[Question ID = 2125]

1. Ripples [Option ID = 8494]
2. Dunes [Option ID = 8495]
3. Antidune [Option ID = 8496]
4. Ripple cross beds [Option ID = 8497]

Correct Answer :-

- Antidune [Option ID = 8496]

75) Which of the following statement is related to the formation of polymictic conglomerate?

[Question ID = 2126]

1. Many single types of clasts [Option ID = 8498]
2. Continuous recycling [Option ID = 8499]
3. Rapid erosion, transportation and deposition [Option ID = 8500]
4. Quartzose conglomerates [Option ID = 8501]

Correct Answer :-

- Rapid erosion, transportation and deposition [Option ID = 8500]

76) The lateral accretion in a meandering channel refers to

[Question ID = 2127]

1. Overbank depositions, [Option ID = 8502]
2. Levees formation [Option ID = 8503]
3. Point bar formation [Option ID = 8504]
4. Formation of soils [Option ID = 8505]

Correct Answer :-

- Point bar formation [Option ID = 8504]

77) Which of the following plant fossil is found in Upper Gondwana?

[Question ID = 2128]

1. Glossopteris [Option ID = 8506]
2. Schizoneura [Option ID = 8507]
3. Nilssonia [Option ID = 8508]
4. Vertebraria [Option ID = 8509]

Correct Answer :-

- Nilssonia [Option ID = 8508]

78) The Kosi alluvial fan is a:

[Question ID = 2129]

1. Small arid alluvial fan [Option ID = 8510]
2. Large arid alluvial fan [Option ID = 8511]
3. Very large humid alluvial fan [Option ID = 8512]
4. Very small humid alluvial fan [Option ID = 8513]

Correct Answer :-

- Very large humid alluvial fan [Option ID = 8512]

79) The youngest of the major thrust sheets across the Himalaya is

[Question ID = 2130]

1. MBT [Option ID = 8514]
2. MCT [Option ID = 8515]
3. ITSZ [Option ID = 8516]
4. MFT [Option ID = 8517]

Correct Answer :-

- MFT [Option ID = 8517]

80) The plagioclase with An_{10} to An_{30} is known as

[Question ID = 2131]

1. Albite [Option ID = 8518]
2. Oligoclase [Option ID = 8519]
3. Andesine [Option ID = 8520]
4. Anorthite [Option ID = 8521]

Correct Answer :-

- Oligoclase [Option ID = 8519]

81) Which of the following is not a monoclinic pyroxene?

[Question ID = 2132]

1. Diopside [Option ID = 8522]
2. Spodumene [Option ID = 8523]
3. Enstatite [Option ID = 8524]
4. Jadeite [Option ID = 8525]

Correct Answer :-

- Enstatite [Option ID = 8524]

82) A catchment on the toposheet 44D/16 has an area of 16 cm², this corresponds to on land

[Question ID = 2133]

1. 4 km² [Option ID = 8526]
2. 8 km² [Option ID = 8527]
3. 12 km² [Option ID = 8528]
4. 16 km² [Option ID = 8529]

Correct Answer :-

- 4 km² [Option ID = 8526]

83) The Toba ash after the large volcanic eruption in Sumatra occurred at

[Question ID = 2134]

1. 10 ka [Option ID = 8530]
2. 25 ka [Option ID = 8531]
3. 50 ka [Option ID = 8532]
4. 75 ka [Option ID = 8533]

Correct Answer :-

- 75 ka [Option ID = 8533]

84) The youngest Stage on the geological time scale is defined by

[Question ID = 2135]

1. Greenlandian [Option ID = 8534]
2. Meghalayan [Option ID = 8535]
3. Northgrippian [Option ID = 8536]
4. Calabrian [Option ID = 8537]

Correct Answer :-

- Meghalayan [Option ID = 8535]

85) The Archaean-Proterozoic transition is marked at

[Question ID = 2136]

1. 4000 Ma [Option ID = 8538]
2. 3000 Ma [Option ID = 8539]
3. 2500 Ma [Option ID = 8540]
4. 1000 Ma [Option ID = 8541]

Correct Answer :-

- 2500 Ma [Option ID = 8540]

86) Permian- Triassic extinction occurred at about

[Question ID = 2137]

1. 250 Ma [Option ID = 8542]
2. 350 Ma [Option ID = 8543]
3. 450 Ma [Option ID = 8544]
4. 200 Ma [Option ID = 8545]

Correct Answer :-

- 250 Ma [Option ID = 8542]

87) The average depth of the oceans is about

[Question ID = 2138]

1. 1.5 km [Option ID = 8546]
2. 2.5 km [Option ID = 8547]
3. 3.5 km [Option ID = 8548]
4. 4.5 km [Option ID = 8549]

Correct Answer :-

- 3.5 km [Option ID = 8548]

88) Which of the following tectonic units separates the Vindhyan supergroup and the Archaean supracrustal in the north western India?

[Question ID = 2139]

1. Main Central Thrust (MCT) [Option ID = 8550]
2. Himalayan Frontal Thrust (HFT) [Option ID = 8551]
3. Central India Tectonic Zone (CITZ) [Option ID = 8552]
4. Great Boundary Fault (GBF) [Option ID = 8553]

Correct Answer :-

- Great Boundary Fault (GBF) [Option ID = 8553]

89) Suket Shale of the Vindhyan Super Group belongs to

[Question ID = 2140]

1. Rohtas Formation [Option ID = 8554]
2. Khenjua Formation [Option ID = 8555]
3. Porcellanite Formation [Option ID = 8556]
4. Deoland Formation [Option ID = 8557]

Correct Answer :-

- Rohtas Formation [Option ID = 8554]

90) The Polarity chron C29R/C29N transition is related to

[Question ID = 2141]

1. K-T Boundary [Option ID = 8558]
2. P-T Boundary [Option ID = 8559]
3. Jurassic-Cretaceous boundary [Option ID = 8560]
4. P-C boundary [Option ID = 8561]

Correct Answer :-

- K-T Boundary [Option ID = 8558]

91) Which of the following is not related to Kimberlite?

[Question ID = 2142]

1. Wajrakurur [Option ID = 8562]
2. Behradih [Option ID = 8563]
3. Majhgawan [Option ID = 8564]
4. Ambadonger [Option ID = 8565]

Correct Answer :-

- Ambadonger [Option ID = 8565]

92) An aquifer bounded on top and bottom by impervious layers is :

[Question ID = 2143]

1. Semiconfined aquifer [Option ID = 8566]
2. Unconfined aquifer [Option ID = 8567]
3. Confined aquifer [Option ID = 8568]
4. Perched [Option ID = 8569]

Correct Answer :-

- Confined aquifer [Option ID = 8568]

93) The polymetallic nodules at the abyssal floor are dominated by

[Question ID = 2144]

1. Mn-Fe [Option ID = 8570]
2. Cu-Ni [Option ID = 8571]
3. Pb-Zn [Option ID = 8572]
4. Co-Ni [Option ID = 8573]

Correct Answer :-

- Mn-Fe [Option ID = 8570]

94) The average salinity of the oceans is about

[Question ID = 2145]

1. 1.0% [Option ID = 8574]
2. 2.0% [Option ID = 8575]
3. 3.5% [Option ID = 8576]
4. 5.0% [Option ID = 8577]

Correct Answer :-

- 3.5% [Option ID = 8576]

95) Which of the following is true for the river water?

[Question ID = 2146]

1. $\text{HCO}_3 > \text{SO}_4 > \text{Cl}$
[Option ID = 8578]
2. $\text{HCO}_3 = \text{SO}_4 = \text{Cl}$
[Option ID = 8579]
3. $\text{HCO}_3 < \text{SO}_4 < \text{Cl}$
[Option ID = 8580]
4. $\text{Cl} > \text{HCO}_3 > \text{SO}_4$
[Option ID = 8581]

Correct Answer :-

- $\text{HCO}_3 > \text{SO}_4 > \text{Cl}$

[Option ID = 8578]

96) Which of the following is true for the ocean water?

[Question ID = 2147]

1. $\text{Ca} > \text{Na} > \text{Mg}$ [Option ID = 8582]
2. $\text{Na} > \text{Mg} > \text{Ca}$ [Option ID = 8583]
3. $\text{Mg} > \text{Ca} > \text{Na}$ [Option ID = 8584]
4. $\text{Ca} > \text{Mg} > \text{Na}$ [Option ID = 8585]

Correct Answer :-

- $\text{Na} > \text{Mg} > \text{Ca}$ [Option ID = 8583]

97) Calcite is a uniaxial (-ve) mineral, because for calcite

[Question ID = 2148]

1. $n_E < n_O$
[Option ID = 8586]
2. $n_E = n_O$
[Option ID = 8587]
3. $n_E > n_O$
[Option ID = 8588]
4. $n_E \gg n_O$
[Option ID = 8589]

Correct Answer :-

- $n_E < n_O$

[Option ID = 8586]

98) Nicol prism is characterized by

[Question ID = 2149]

1. Total reflection of extra-ordinary rays but transmission of ordinary ray [Option ID = 8590]
2. Total reflection of ordinary rays but transmission of extra- ordinary ray [Option ID = 8591]
3. Total reflection of both ordinary ray and the extra-ordinary ray [Option ID = 8592]
4. Transmission of both ordinary ray and the extra-ordinary ray [Option ID = 8593]

Correct Answer :-

- Total reflection of ordinary rays but transmission of extra- ordinary ray [Option ID = 8591]

99) A fluvial system in general is defined by

[Question ID = 2150]

1. Catchment [Option ID = 8594]
2. Transport [Option ID = 8595]
3. Deposition [Option ID = 8596]
4. Catchment + Transport + Deposition [Option ID = 8597]

Correct Answer :-

- Catchment + Transport + Deposition [Option ID = 8597]

100) The PETM event is defined by

[Question ID = 2151]

1. 5°C to 6°C rise in temperature at 55 Ma [Option ID = 8598]
2. 5°C to 6°C cooling in temperature at 65 Ma [Option ID = 8599]
3. 15°C to 16°C rise in temperature at 55 Ma [Option ID = 8600]
4. 15°C to 16°C cooling in temperature at 65 Ma [Option ID = 8601]

Correct Answer :-

- 5°C to 6°C rise in temperature at 55 Ma [Option ID = 8598]