DU MSc Geology

Topic:- DU_J19_MSC_GEO

1) If the RQD value is 65, then the rock quality is said to be [Question ID = 2756]

- 1. Fair [Option ID = 11021]
- 2. Good [Option ID = 11022]
- 3. None of these [Option ID = 11024]
- 4. Excellent [Option ID = 11023]

Correct Answer:-

Fair [Option ID = 11021]

2) If the hinge line of a fold has a pitch of 85° on the easterly dipping axial surface, the fold is called [Question ID = 2716]

- 1. Recumbent fold [Option ID = 10861]
- 2. Reclined fold [Option ID = 10864]
- 3. Plunging upright fold [Option ID = 10862]
- 4. Non-plunging inclined fold [Option ID = 10863]

Correct Answer:-

Recumbent fold [Option ID = 10861]

3) Which of the following elements is present in 4 and 6 coordination with O?

[Question ID = 2803]

- 1. K^+ [Option ID = 11209]
- 2. Na^{+} [Option ID = 11211]
- 3. Ca^{2+} [Option ID = 11210]
- 4. AI^{3+} [Option ID = 11212]

Correct Answer:-

• K⁺ [Option ID = 11209]

4) Which of the following part of EMR correspond to X-Rays?

[Question ID = 2785]

- 1. 0.03 nm to 0.3 nm [Option ID = 11138]
- <0.03 nm [Option ID = 11137]
- 3. $0.4 \mu m$ to $0.7 \mu m$ [Option ID = 11139]
- 4. 0.7 μ m to 3 μ m [Option ID = 11140]

Correct Answer:-

<0.03 nm [Option ID = 11137]

5) The mountain slope in arid region showing erosion and very thin veneer of sediments is known as: [Question ID = 2713]

- 1. Bolson [Option ID = 10852] 2. Pediment [Option ID = 10851] 3. Playa [Option ID = 10849] Piedmont [Option ID = 10850] **Correct Answer:-** Playa [Option ID = 10849] 6) A greisen deposit exposes the _____ part of a granitic body. [Question ID = 2736] 1. Uppermost [Option ID = 10942] 2. Middle [Option ID = 10943] 3. Lower [Option ID = 10941] 4. Basal [Option ID = 10944] **Correct Answer:-** Lower [Option ID = 10941] 7) The mineralogical abundance of the Earth's crust shows thatis the most abundant mineral. [Question ID = 2767] 1. Olivine [Option ID = 11068] 2. Feldspar [Option ID = 11065] 3. Quartz [Option ID = 11066] 4. Pyroxene [Option ID = 11067] **Correct Answer:-**• Feldspar [Option ID = 11065] 8) Serpentine is a [Question ID = 2740] 1. Tectosilicate [Option ID = 10958] 2. Inosilicate [Option ID = 10957] 3. Nesosilicate [Option ID = 10960] 4. Phyllosilicate [Option ID = 10959] **Correct Answer:-** Inosilicate [Option ID = 10957] 9) A sedimentologist interprets a matrix-supported conglomerate with sharp, non-erosional base and with a(p)a(i) imbrication of clast as product of [Question ID = 2722] 1. Unconformity [Option ID = 10885] 2. Grain flow [Option ID = 10887] 3. Channel lag [Option ID = 10886] 4. Debris flow [Option ID = 10888]
- **Correct Answer:-**
- Unconformity [Option ID = 10885]

10) Bhakra dam is made up of [Question ID = 2755]

- 1. Earth fill [Option ID = 11017]
- 2. A combination of all [Option ID = 11020]
- 3. Concrete [Option ID = 11019]
- 4. Rock fill [Option ID = 11018]

• Earth fill [Option ID = 11017]

11) Sea water is saline because [Question ID = 2729]

- 1. Na^{+2} has higher residency time compared to Ca^{+2} [Option ID = 10916]
- 2. Na⁺ and Cl⁻ are most abundant cation and anion in seawater. [Option ID = 10913]
- 3. Ca^{+2} is les abundant in sea water than Na^{+2} [Option ID = 10915]
- 4. Na^{+2} is abundant but Cl^{-1} is less abundant. [Option ID = 10914]

Correct Answer:-

• Na⁺ and Cl⁻ are most abundant cation and anion in seawater. [Option ID = 10913]

12) Texturally super mature sandstone is defined by [Question ID = 2772]

- 1. Lots of clay, well-sorting, Subrounded grains [Option ID = 11086]
- 2. Lots of clay, poor sorting, subangular grains [Option ID = 11085]
- 3. Little or no clay, poor-soring, angular grains [Option ID = 11088]
- 4. No clay, well-soring, well rounded grains [Option ID = 11087]

Correct Answer:-

Lots of clay, poor sorting, subangular grains [Option ID = 11085]

13) In a 'Similar fold', the dip isogons drawn on the two limbs of the folded layer in a profile section

[Question ID = 2717]

- 1. diverge strongly towards the core [Option ID = 10867]
- 2. remain parallel to the axial trace [Option ID = 10866]
- 3. converge strongly towards the core [Option ID = 10865]
- 4. converge weakly towards the core. [Option ID = 10868]

Correct Answer:-

converge strongly towards the core [Option ID = 10865]

14) Early stages of diagenesis in carbonate rocks show [Question ID = 2774]

- 1. Blocky cement [Option ID = 11094]
- 2. Rim cement [Option ID = 11095]
- 3. Drusy cement [Option ID = 11093]
- 4. Pressure solution [Option ID = 11096]

Correct Answer:-

Drusy cement [Option ID = 11093]

15) The metamorphic facies not present in the low-P series metamorphism is [Question ID = 2741]

- 1. Amphibolite facies [Option ID = 10962]
- 2. Epidote-amphibolite facies [Option ID = 10961]
- 3. Pyroxene Hornfels facies [Option ID = 10963]
- 4. Sanidinite facies [Option ID = 10964]

• Epidote-amphibolite facies [Option ID = 10961]

16) Hydraulic conductivity is a function of: [Question ID = 2705]

- 1. Medium alone [Option ID = 10817]
- 2. Both fluid and medium [Option ID = 10819]
- 3. None of the above [Option ID = 10820]
- 4. Fluid alone [Option ID = 10818]

Correct Answer:-

Medium alone [Option ID = 10817]

17) The most fundamental unit of lithostratigraphy is: [Question ID = 2787]

- 1. Group [Option ID = 11145]
- 2. Super Group [Option ID = 11146]
- 3. Member [Option ID = 11148]
- 4. Formation [Option ID = 11147]

Correct Answer:-

Group [Option ID = 11145]

18) Which part of the Earth is marked by extensive weathering and formation of thick Fe and Al hydroxides and oxides? [Question ID = 2768]

- 1. Steppe [Option ID = 11070]
- 2. Tropical [Option ID = 11072]
- 3. Desert [Option ID = 11071]
- 4. Savana [Option ID = 11069]

Correct Answer:-

• Savana [Option ID = 11069]

19) The principal section of a uniaxial mineral contains [Question ID = 2760]

- 1. Optic axis and one vertical symmetry axis. [Option ID = 11040]
- 2. Optic axis and one horizontal symmetry axis [Option ID = 11039]
- 3. Optic axis and extraordinary ray [Option ID = 11038]
- 4. Optic axis and ordinary ray [Option ID = 11037]

Correct Answer:-

Optic axis and ordinary ray [Option ID = 11037]

20) Resistivity sounding in groundwater exploration estimates : [Question ID = 2710]

- Variation of resistivity with depth [Option ID = 10837]
- 2. None of the above [Option ID = 10840]
- 3. Horizontal variation in resistivity [Option ID = 10838]
- 4. Both Variation of resistivity with depth and Horizontal variation in resistivity [Option ID = 10839]

Correct Answer:-

• Variation of resistivity with depth [Option ID = 10837]

21) In the earth atmosphere, the atmospheric pressure [Question ID = 2734]

- 1. increases with height [Option ID = 10933]
- 2. remains constant with height [Option ID = 10935]
- 3. first increases and then decreases with height [Option ID = 10936]
- 4. decreases with height [Option ID = 10934]

increases with height [Option ID = 10933]

22) This assemblage is characteristic of low to medium grade low-P series metamorphism of pelites [Question ID = 2739]

- 1. Kyanite+garnet+biotite+muscovite+quartz [Option ID = 10956]
- 2. Garnet+sillimanite+Kfeldspar+biotite+quartz [Option ID = 10954]
- 3. Cordierite+sillimanite+Kfeldspar+quartz [Option ID = 10953]
- 4. Cordierite+biotite+muscovite+quartz [Option ID = 10955]

Correct Answer:-

Cordierite+sillimanite+Kfeldspar+quartz [Option ID = 10953]

23) A glide plane involves [Question ID = 2761]

- 1. Inversion + rotation [Option ID = 11044]
- 2. Translation + inversion [Option ID = 11043]
- 3. Reflection + translation [Option ID = 11042]
- 4. Rotation + reflection [Option ID = 11041]

Correct Answer:-

Rotation + reflection [Option ID = 11041]

24) The seismic discontinuity within Earth at a depth of about 2,900 km is known as: [Question ID = 2786]

- 1. Gutenberg Discontinuity [Option ID = 11142]
- 2. Mohorovicic Discontinuity [Option ID = 11141]
- 3. Lehmann Discontinuity [Option ID = 11143]
- 4. Conard Discontinuity [Option ID = 11144]

Correct Answer:-

Mohorovicic Discontinuity [Option ID = 11141]

25) The spinifex texture with long spines of olivine is associated with: [Question ID = 2801]

- 1. Komatiite [Option ID = 11203]
- 2. Kimberlite [Option ID = 11204]
- 3. Gabbro [Option ID = 11202]
- 4. Basalt [Option ID = 11201]

Correct Answer:-

Basalt [Option ID = 11201]

26) The Ganga Brahmaputra groundwater province includes [Question ID = 2712]

- 1. The Aravallis [Option ID = 10847]
- 2. The Deccan basalts [Option ID = 10846]
- 3. The Vindhyans [Option ID = 10845]
- 4. Bhabar and Tarai belts [Option ID = 10848]

• The Vindhyans [Option ID = 10845]

27) The composition of the Brachiopod evolved from ----- to ----. [Question ID = 2779]

- 1. Calcareous to siliceous [Option ID = 11116]
- 2. Siliceous to phosphatic [Option ID = 11113]
- 3. Chitin-phosphate to siliceous [Option ID = 11115]
- 4. Chitin-phosphate to calcareous [Option ID = 11114]

Correct Answer:-

Siliceous to phosphatic [Option ID = 11113]

28) Glossopteris became less diverse in [Question ID = 2744]

- 1. Permian [Option ID = 10973]
- 2. Triassic [Option ID = 10975]
- 3. Cretaceous [Option ID = 10974]
- 4. Jurassic [Option ID = 10976]

Correct Answer:-

Permian [Option ID = 10973]

29) The physics of how organisms move is known as [Question ID = 2753]

- 1. Biomechanics [Option ID = 11010]
- 2. Biotechnology [Option ID = 11009]
- 3. biostratinomy [Option ID = 11012]
- 4. bioimmuration [Option ID = 11011]

Correct Answer:-

• Biotechnology [Option ID = 11009]

30) Deepest Trench occurs in [Question ID = 2732]

- 1. Atlantic Ocean [Option ID = 10927]
- 2. Indian Ocean [Option ID = 10928]
- 3. Pacific Ocean [Option ID = 10926]
- 4. Arctic Ocean [Option ID = 10925]

Correct Answer:-

Arctic Ocean [Option ID = 10925]

31) In pericline law of twining in plagioclase, the rhombic section is parallel to [Question ID = 2762]

- 1. (101) [Option ID = 11047]
- 2. (001) [Option ID = 11046]
- 3. (011) [Option ID = 11048]
- 4. (010) [Option ID = 11045]

Correct Answer:-

• (010) [Option ID = 11045]

32)

Leucite is comparatively silica poor than microcline. Its chemical formula is [Question ID = 2765]

- 1. $KAISi_2O_8$ [Option ID = 11059]
- 2. $KAlSi_2O_6$ [Option ID = 11060]
- 3. $KAlSi_3O_8$ [Option ID = 11057]
- 4. $KAl_2Si_3O_8$ [Option ID = 11058]

Correct Answer:-

KAlSi₃O₈ [Option ID = 11057]

33) A fold with a sharp hinge and slightly bent (wavy) limbs in a profile section is called: [Question ID = 2715]

- 1. Arrowhead fold [Option ID = 10859]
- 2. Box fold [Option ID = 10860]
- 3. Polyclinal fold [Option ID = 10858]
- 4. Chevron fold [Option ID = 10857]

Correct Answer:-

Chevron fold [Option ID = 10857]

34) AFM diagrams for metamorphic rocks can be called as

[Question ID = 2743]

- 1. Compatibility diagrams [Option ID = 10971]
- 2. Pseudocomponent diagrams [Option ID = 10970]
- 3. Phase diagrams [Option ID = 10969]
- 4. All of the above [Option ID = 10972]

Correct Answer:-

Phase diagrams [Option ID = 10969]

35) The monsoon has well developed cycle in [Question ID = 2733]

- 1. East United State [Option ID = 10932]
- 2. Africa [Option ID = 10931]
- 3. Indian and South East Asia [Option ID = 10929]
- 4. North Australia [Option ID = 10930]

Correct Answer:-

Indian and South East Asia [Option ID = 10929]

36) The drainage pattern over a gently sloping, uniformly resistant terrain will be [Question ID = 2776]

- 1. Parallel [Option ID = 11103]
- 2. Trellis [Option ID = 11102]
- 3. Dendritic [Option ID = 11104]
- 4. Rectangular [Option ID = 11101]

Correct Answer:-

• Rectangular [Option ID = 11101]

37) The triple point for the kyanite, sillimanite and andalusite occurs at: [Question ID = 2799]

- 1. 8 kbar, 810 °C [Option ID = 11195]
- 2. 6 kbar, 610 °C [Option ID = 11193]
- 3. 8 kbar, 310 °C [Option ID = 11196]
- 4. 5 kbar, 710 °C [Option ID = 11194]

6 kbar, 610 °C [Option ID = 11193]

38) The last appearance of Hipparion defines the: [Question ID = 2789]

- 1. Paleocene/Eocene boundary [Option ID = 11153]
- 2. Miocene/Pliocene boundary [Option ID = 11156]
- 3. Oligocene/Miocene boundary [Option ID = 11155]
- 4. Pliocene/Pleistocene boundary [Option ID = 11154]

Correct Answer:-

Paleocene/Eocene boundary [Option ID = 11153]

39) The bedforms of the lower flow regime migrate: [Question ID = 2769]

- 1. Downstream [Option ID = 11074]
- 2. Do not migrate [Option ID = 11076]
- 3. Upstream [Option ID = 11073]
- 4. Transverse to flow [Option ID = 11075]

Correct Answer:-

• Upstream [Option ID = 11073]

40) Calcium in garnet is in [Question ID = 2764]

- 1. 3 fold coordination [Option ID = 11053]
- 2. 8 fold coordination [Option ID = 11056]
- 3. 6 fold coordination [Option ID = 11055]
- 4. 4 fold coordination [Option ID = 11054]

Correct Answer:-

3 fold coordination [Option ID = 11053]

41) The cephalopod with both saddle and lobes denticulated is: [Question ID = 2782]

- 1. Goniatite [Option ID = 11125]
- 2. Ammonite [Option ID = 11127]
- 3. None of the above [Option ID = 11128]
- 4. Ceratitie [Option ID = 11126]

Correct Answer:-

Goniatite [Option ID = 11125]

42) The marine to continental transition in the Himalayan foreland is marked by: [Question ID = 2792]

- 1. Upper Dharamshala to Lower Siwaliks [Option ID = 11168]
- 2. Lower to Middle Upper Siwalik [Option ID = 11165]
- 3. Subathu to Dagshai Formation [Option ID = 11167]
- 4. Dagshai to Kasouli Formation [Option ID = 11166]

Lower to Middle Upper Siwalik [Option ID = 11165]

43) Cambrian explosion marks the beginning of ————— [Question ID = 2749]

- 1. extinction of trilobites [Option ID = 10996]
- 2. Skeletalisation [Option ID = 10993]
- 3. Diversification of corals [Option ID = 10994]
- 4. Trilobite expansion [Option ID = 10995]

Correct Answer:-

Skeletalisation [Option ID = 10993]

44) In order to analyze paleo-environment/s of a sedimentary basin in geological rock record, we mainly depend on [Question ID = 2721]

- 1. Paleo-current analyses [Option ID = 10882]
- 2. Facies association analyses [Option ID = 10883]
- 3. Facies analyses [Option ID = 10881]
- 4. Lithological description [Option ID = 10884]

Correct Answer:-

• Facies analyses [Option ID = 10881]

45) Bone coal refers to [Question ID = 2720]

- 1. Very pure coal containing low ash content [Option ID = 10878]
- Dense coal with more than 90% carbon [Option ID = 10880]
- Very impure coal containing high ash content [Option ID = 10877]
- 4. Dull, black coal that breaks with conchoidal fracture [Option ID = 10879]

Correct Answer:-

Very impure coal containing high ash content [Option ID = 10877]

46) Plutonic equivalent of Trachyte is: [Question ID = 2802]

- 1. Syenite [Option ID = 11207]
- 2. Granite [Option ID = 11205]
- 3. Diorite [Option ID = 11208]
- 4. Granodiorite [Option ID = 11206]

Correct Answer:-

Granite [Option ID = 11205]

47) Humans dispersed out from ———— centre of origin [Question ID = 2745]

- 1. African [Option ID = 10977]
- 2. European [Option ID = 10979]
- 3. New World [Option ID = 10980]
- 4. Asian [Option ID = 10978]

Correct Answer:-

• African [Option ID = 10977]

48) Cyclic twinning is associated with: [Question ID = 2800]

- 1. Rutile [Option ID = 11199]
- 2. Pyrite [Option ID = 11197]
- 3. Orthoclase [Option ID = 11200]
- 4. Aragonite [Option ID = 11198]

Pyrite [Option ID = 11197]

49) Pigeonite is a clinopyroxene that contains [Question ID = 2759]

- 1. Less Ca than Augite [Option ID = 11036]
- 2. More Ca than Augite [Option ID = 11035]
- 3. Less Na than Augite [Option ID = 11034]
- 4. More Na than Augite [Option ID = 11033]

Correct Answer:-

More Na than Augite [Option ID = 11033]

50) The Ganges-Brahmputra delta is characterized by [Question ID = 2777]

- 1. Tide dominated marshy island, bars and mangroves [Option ID = 11107]
- 2. Fluvial dominated long streams with natural levees [Option ID = 11105]
- 3. Braid plains and bars [Option ID = 11108]
- 4. Wave dominated beaches and barriers [Option ID = 11106]

Correct Answer:-

• Fluvial dominated long streams with natural levees [Option ID = 11105]

51) The mantle plume related to Deccan Trap is known as: [Question ID = 2791]

- 1. Kergulean [Option ID = 11161]
- 2. Jan Mayen [Option ID = 11164]
- 3. Marion [Option ID = 11163]
- 4. Reunian [Option ID = 11162]

Correct Answer:-

Kergulean [Option ID = 11161]

52) <u>Assertion (A)</u>:Tetrapods are vertebrates but some vertebrates are not tetrapods <u>Reasoning (R)</u>: Vertebrae appeared first followed by tetrapod limb in the evolutionary history of chordates [Question ID = 2751]

- 1. R explains A [Option ID = 11003]
- 2. A & R are false [Option ID = 11002]
- 3. A is false [Option ID = 11001]
- 4. R does not explain A [Option ID = 11004]

Correct Answer:-

• A is false [Option ID = 11001]

53) The plagioclase with ab50 to ab70 is known as [Question ID = 2796]

- 1. Albite [Option ID = 11181]
- 2. Anorthite [Option ID = 11184]
- 3. Andesine [Option ID = 11183]
- 4. Oligoclase [Option ID = 11182]

Albite [Option ID = 11181]

54) In prograde metamorphism of mafic rocks from greenschist to amphibolite facies which is/are the characteristic change/s [Question ID = 2735]

- 1. Change of anorthite content of plagioclase from oligoclase to andesine [Option ID = 10937]
- 2. First appearance of orthopyroxene [Option ID = 10940]
- 3. Both Change of anorthite content of plagioclase from oligoclase to andesine and Change of amphibole composition from actinolite to common hornblende [Option ID = 10939]
- 4. Change of amphibole composition from actinolite to common hornblende [Option ID = 10938]

Correct Answer:-

• Change of anorthite content of plagioclase from oligoclase to andesine [Option ID = 10937]

55) Speciation by geographic isolation is known as

[Question ID = 2748]

- 1. Allopatric [Option ID = 10989]
- 2. Sympatric [Option ID = 10990]
- 3. None of these [Option ID = 10992]
- 4. Anagenesis [Option ID = 10991]

Correct Answer:-

• Allopatric [Option ID = 10989]

56) Kyanite=> Sillimanite [Question ID = 2742]

- 1. A continuous reaction [Option ID = 10966]
- 2. A discontinuous reaction [Option ID = 10965]
- 3. A oxidation reaction [Option ID = 10968]
- 4. An Ion-Exchange reaction [Option ID = 10967]

Correct Answer:-

A discontinuous reaction [Option ID = 10965]

57) Total number of lattice points in a 3-d primitive cell is

[Question ID = 13542]

- 1. 1 [Option ID = 24165]
- 2. 4 [Option ID = 24167]
- 3. 2 [Option ID = 24166]
- 4. 8 [Option ID = 24168]

Correct Answer:-

1 [Option ID = 24165]

58) Reversal of paleocurrent, cross bedding and mud drapes commonly occur in: [Question ID = 2724]

- 1. None of the above [Option ID = 10896]
- Tide dominated delta [Option ID = 10895]
- 3. Wave dominated delta [Option ID = 10894]

4. Fluvial dominated delta [Option ID = 10893]

Correct Answer:-

Fluvial dominated delta [Option ID = 10893]

59) Which of the following Brachiopod is still living? [Question ID = 2780]

- 1. Athyris [Option ID = 11118]
- 2. Orthis [Option ID = 11117]
- 3. Lingula [Option ID = 11120]
- 4. Atryrapa [Option ID = 11119]

Correct Answer:-

Orthis [Option ID = 11117]

60) Which of the following silica minerals is a characteristic of high pressure in excess of 20 Kbar? [Question ID = 2794]

- 1. Cristobalite [Option ID = 11176]
- 2. Opal [Option ID = 11173]
- 3. Tridymite [Option ID = 11174]
- 4. Coesite [Option ID = 11175]

Correct Answer:-

Opal [Option ID = 11173]

61) Which of the following minerals is a cyclosilicate? [Question ID = 2793]

- 1. Olivine [Option ID = 11169]
- 2. Anthophyllite [Option ID = 11172]
- 3. Enstatite [Option ID = 11170]
- 4. Beryl [Option ID = 11171]

Correct Answer:-

• Olivine [Option ID = 11169]

62) Which of the followings rocks is the most abundant sedimentary rock in geological record of the Earth? [Question ID = 2766]

- 1. Mud rocks [Option ID = 11061]
- 2. Limestones [Option ID = 11063]
- 3. Sandstones [Option ID = 11062]
- 4. Conglomerates [Option ID = 11064]

Correct Answer:-

Mud rocks [Option ID = 11061]

63) Highstand of Sea level favours [Question ID = 2723]

- 1. Calcitic ooids due to higher CO₂ and lower Mg/Ca ratio [Option ID = 10889]
- 2. Aragonite ooids due to lower CO₂ and higher Mg/Ca ratio [Option ID = 10891]
- 3. Calcite ooids due to lower CO₂ and lower Mg/Ca ratio [Option ID = 10892]
- 4. Calcitic ooids due to higher CO_2 and higher Mg/Ca ratio [Option ID = 10890]

Correct Answer:-

• Calcitic ooids due to higher CO₂ and lower Mg/Ca ratio [Option ID = 10889]

64) Ediacaran Metazoan appeared at: [Question ID = 2790]

- 1. Hadean [Option ID = 11159]
- 2. Archean [Option ID = 11160]
- 3. paleo Proterozoic [Option ID = 11157]
- 4. Neoproterozoic [Option ID = 11158]

Correct Answer:-

• paleo Proterozoic [Option ID = 11157]

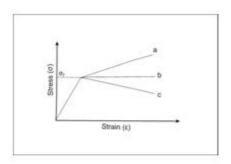
65) Coral reefs are generally found in [Question ID = 2726]

- 1. Tropical regions [Option ID = 10902]
- 2. Subtropical regions [Option ID = 10904]
- 3. Mid latitude region [Option ID = 10903]
- 4. Polar regions [Option ID = 10901]

Correct Answer:-

• Polar regions [Option ID = 10901]

66)



The above figure shows the flow behaviour of three plastic materials a, b, c. Which of the three substances show a 'strain hardening' nature?

[Question ID = 2718]

- 1. none of the above [Option ID = 10872]
- 2. material a [Option ID = 10869]
- 3. material b [Option ID = 10870]
- 4. material c [Option ID = 10871]

Correct Answer:-

material a [Option ID = 10869]

67) PT stability curve of Muscovite intersects Granite melt at about [Question ID = 2798]

- 1. 1.5 kbar, 700°C [Option ID = 11190]
- 2. 3 kbar, 1000°C [Option ID = 11191]
- 3. 1 kbar, 1500°C [Option ID = 11189]
- 4. 4 kbar, 900°C [Option ID = 11192]

Correct Answer:-

• 1 kbar, 1500°C [Option ID = 11189]

68) The main driving force behind horse evolution is [Question ID = 2746]

1. Tectonics [Option ID = 10981] 2. Orogeny [Option ID = 10983] 3. Climate [Option ID = 10982] 4. marine transgression [Option ID = 10984] **Correct Answer:-** Tectonics [Option ID = 10981] 69) The Zawar deposit in Udaipur district is an important source of _____ [Question ID = 2737] 1. Lead – Zinc [Option ID = 10946] 2. Gold - Silver [Option ID = 10948] 3. Tin - Tungsten [Option ID = 10947]4. Copper [Option ID = 10945] **Correct Answer:-**• Copper [Option ID = 10945] 70) The hydrographs of the streams are useful to asses: [Question ID = 2707] 1. River response [Option ID = 10827] 2. Base flow [Option ID = 10825] Storm flow [Option ID = 10826] 4. All of the above [Option ID = 10828] **Correct Answer:-** Base flow [Option ID = 10825] 71) Imperceptible/very slow downslope movement of soil/rock is known as: [Question ID = 2754] 1. Creep [Option ID = 11015] 2. Topple [Option ID = 11014] 3. Avalanche [Option ID = 11013] 4. Debris flow [Option ID = 11016] **Correct Answer:-** Avalanche [Option ID = 11013] 72) Which of the following type of volcanic activity is marked by fissure and basaltic flows? [Question ID = 2778] 1. Plinian [Option ID = 11110] 2. Icelandic [Option ID = 11111] 3. Pelean [Option ID = 11112] 4. Vesuvian [Option ID = 11109] **Correct Answer:-**Vesuvian [Option ID = 11109]

73) Which of the following is marked by loop shaped brachial skeleton? [Question ID = 2781]

Terebratula [Option ID = 11123]
Spirifer [Option ID = 11122]
Productus [Option ID = 11124]

Rhynchonella [Option ID = 11121]

Correct Answer:-

Rhynchonella [Option ID = 11121]

74) Which of the following trace fossil indicates the deep marine conditions? [Question ID = 2771]

- 1. Zoophycos [Option ID = 11083]
- 2. Nereites [Option ID = 11084]
- 3. Skolithos [Option ID = 11082]
- 4. Cruziana [Option ID = 11081]

Correct Answer:-

• Cruziana [Option ID = 11081]

75) Which of the following is a Li bearing pyroxene? [Question ID = 2797]

- 1. Spodumene [Option ID = 11187]
- 2. Jadeite [Option ID = 11186]
- 3. Diopside [Option ID = 11188]
- 4. Enstatite [Option ID = 11185]

Correct Answer:-

• Enstatite [Option ID = 11185]

76) Which of the following plant fossil is not found in Lower Gondwana? [Question ID = 2784]

- 1. Glossopteris [Option ID = 11133]
- 2. Vertebraria [Option ID = 11136]
- 3. Nilssonia [Option ID = 11135]
- 4. Schizoneura [Option ID = 11134]

Correct Answer:-

• Glossopteris [Option ID = 11133]

77) Which of the following is not a sulfide ore mineral? [Question ID = 2738]

- 1. Molybdenite [Option ID = 10949]
- 2. Bornite [Option ID = 10950]
- 3. Marcasite [Option ID = 10952]
- 4. Cuprite [Option ID = 10951]

Correct Answer:-

• Molybdenite [Option ID = 10949]

78) Which of the following map can give direction of groundwater flow: [Question ID = 2709]

- 1. Water level fluctuation map [Option ID = 10834]
- 2. None of the above [Option ID = 10836]
- 3. Depth to water level map [Option ID = 10833]
- 4. Water table contour map [Option ID = 10835]

Correct Answer:-

• Depth to water level map [Option ID = 10833]

79) Which of the following is characterized by the highest Vitrinite reflectance? [Question ID = 2773]

- 1. Bituminous coal [Option ID = 11092]
- 2. Peat [Option ID = 11089]
- 3. Lignite [Option ID = 11090]
- 4. Anthracite [Option ID = 11091]

Correct Answer:-

Peat [Option ID = 11089]

80) Which of the following primary producer with calcareous skeletal framework evolved during the Mesozoic marine revolution [Question ID = 2750]

- 1. diatoms [Option ID = 10998]
- 2. coccolithophorids [Option ID = 10999]
- 3. radiolarians [Option ID = 10997]
- 4. sponges [Option ID = 11000]

Correct Answer:-

radiolarians [Option ID = 10997]

81) Which of the following methods is best suited to date the marine carbonates upto the last 30,000 yr BP [Question ID = 2725]

- 1. 210 Pb dating [Option ID = 10899]
- 2. Thermoluminescence dating [Option ID = 10897]
- 3. U/Th dating [Option ID = 10900]
- 4. Radiocarbon dating [Option ID = 10898]

Correct Answer:-

Thermoluminescence dating [Option ID = 10897]

82) In an isotropic aquifer [Question ID = 2708]

- 1. None of the above [Option ID = 10832]
- 2. Aquifer parameters vary in space and direction both [Option ID = 10831]
- 3. Aquifer parameters are same in all directions [Option ID = 10829]
- 4. Aquifer parameters does not vary spatially [Option ID = 10830]

Correct Answer:-

Aquifer parameters are same in all directions [Option ID = 10829]

83) An unconformity where the lower (underlying the unconformity surface) unit is essentially of plutonic rocks, is known as: [Question ID = 2719]

- 1. An angular unconformity [Option ID = 10875]
- 2. A non-conformity [Option ID = 10876]
- 3. A disconformity [Option ID = 10873]
- 4. A para-conformity [Option ID = 10874]

Correct Answer:-

A disconformity [Option ID = 10873]

84) A confined aquifer behaves as an unconfined aquifer when: [Question ID = 2714]

- 1. The piezometric head falls below the top of the upper confining layer [Option ID = 10854]
- 2. None of the above [Option ID = 10856]
- 3. The piezometric head falls below the top of the lower confining layer [Option ID = 10855]
- 4. The piezometric head falls below the bottom of the upper confining layer [Option ID = 10853]

The piezometric head falls below the bottom of the upper confining layer [Option ID = 10853]

85) The oldest seafloor on Earth is not more than [Question ID = 2730]

- 1. 2 million years old. [Option ID = 10920]
- 2. 200 million years old. [Option ID = 10917]
- 3. 20 million years old. [Option ID = 10919]
- 4. 2 billion years old. [Option ID = 10918]

Correct Answer:-

• 200 million years old. [Option ID = 10917]

86) In unconfined aquifer Storativity is approximately equal to: [Question ID = 2706]

- 1. Intrinsic permeability [Option ID = 10822]
- 2. Conductivity [Option ID = 10821]
- 3. None of the above [Option ID = 10824]
- 4. Specific retention [Option ID = 10823]

Correct Answer:-

• Conductivity [Option ID = 10821]

87) The optic axial plane of Epidote is [Question ID = 2758]

- 1. (110) [Option ID = 11032]
- 2. (001) [Option ID = 11031]
- 3. (100) [Option ID = 11029]
- 4. (010) [Option ID = 11030]

Correct Answer:-

(100) [Option ID = 11029]

88) In biostratigraphy, graphic correlation method uses [Question ID = 2752]

- 1. Ranges of all species [Option ID = 11006]
- 2. Abundance zones [Option ID = 11007]
- 3. Concurrent range zones [Option ID = 11008]
- 4. Assemblage zones [Option ID = 11005]

Correct Answer:-

Assemblage zones [Option ID = 11005]

89) The high temperature monoclinic variety of alkali feldspar is known as [Question ID = 2795]

- 1. Albite [Option ID = 11177]
- 2. Microcline [Option ID = 11180]
- 3. Sanidine [Option ID = 11179]
- 4. Anorthoclase [Option ID = 11178]

Correct Answer:-

Albite [Option ID = 11177]

90) The Ninety East Ridge is present in which ocean [Question ID = 2731]

- 1. Arctic [Option ID = 10924]
- 2. Atlantic [Option ID = 10921]
- 3. Pacific [Option ID = 10923]
- 4. Indian [Option ID = 10922]

Correct Answer:-

Atlantic [Option ID = 10921]

91) Sodium Adsorption Ratio in groundwater quality is used for studying [Question ID = 2711]

- 1. Hydrochemical facies of water samples [Option ID = 10841]
- 2. Suitability of groundwater for irrigation uses [Option ID = 10843]
- 3. Portability of water [Option ID = 10844]
- 4. Metamorphic facies of rock samples [Option ID = 10842]

Correct Answer:-

Hydrochemical facies of water samples [Option ID = 10841]

92) The Greenland ice sheet is defined by

[Question ID = 2775]

- 1. Wet base [Option ID = 11097]
- 2. Dry base [Option ID = 11098]
- 3. Dry-wet transition [Option ID = 11099]
- 4. None of the above [Option ID = 11100]

Correct Answer:-

Wet base [Option ID = 11097]

93) The Hadean Eon corresponds to evolution of Earth during;

[Question ID = 2788]

- 1. 2500 Ma to 542 Ma [Option ID = 11150]
- 2. 4560 Ma to 3850 Ma [Option ID = 11149]
- 3. < 542 Ma [Option ID = 11152]
- 4. 3850 Ma to 2500 Ma [Option ID = 11151]

Correct Answer:-

4560 Ma to 3850 Ma [Option ID = 11149]

94) The type specimen used while describing a new species is known as

[Question ID = 2747]

- 1. Syntype [Option ID = 10986]
- 2. Holotype [Option ID = 10987]
- 3. Paratype [Option ID = 10985]
- 4. None of the above [Option ID = 10988]

• Paratype [Option ID = 10985]

95) The Agnostus trilobite from Cambrian and Ordovician is marked by

[Question ID = 2783]

- 1. Very large pygidium but very small cephalon [Option ID = 11129]
- 2. Small pygidium but no cephalon [Option ID = 11132]
- 3. Very small pygidium but very large cephalon [Option ID = 11130]
- 4. Pygidium and cephalon are almost similar in size [Option ID = 11131]

Correct Answer:-

• Very large pygidium but very small cephalon [Option ID = 11129]

96) The transition from lower to upper flow regime occurs when Froude No is

[Question ID = 2770]

- 1. Fr = < 0.1 [Option ID = 11080]
- 2. Fr = >0.1 [Option ID = 11077]
- 3. Fr= \sim 1 [Option ID = 11079]
- 4. Fr= <1 [Option ID = 11078]

Correct Answer:-

• Fr= >0.1 [Option ID = 11077]

97) The wind system in the equatorial areas is known as: [Question ID = 2728]

- 1. Monsoon [Option ID = 10912]
- 2. Doldrums [Option ID = 10911]
- 3. Westerlies [Option ID = 10909]
- 4. Trades [Option ID = 10910]

Correct Answer:-

• Westerlies [Option ID = 10909]

98) The cosmic ray intensity is minimum at the magnetic [Question ID = 2727]

- 1. Equator [Option ID = 10905]
- 2. North pole [Option ID = 10906]
- 3. South pole [Option ID = 10907]
- 4. Tropic of cancer [Option ID = 10908]

Correct Answer:-

Equator [Option ID = 10905]

99) Anorthoclase is [Question ID = 2763]

- 1. Intermediate between Microcline and Albite [Option ID = 11050]
- 2. Intermediate between sanidine and Albite [Option ID = 11051]
- 3. Intermediate between orthoclase and Anorthite [Option ID = 11049]
- 4. Intermediate between sanidine and Anorthite. [Option ID = 11052]

Correct Answer:-

• Intermediate between orthoclase and Anorthite [Option ID = 11049]

100) An imaginary horizontal reference line located at the maximum horizontal dimension or diameter of a tunnel is called [Question ID = 2757]

- 1. Tunnel Line [Option ID = 11025]
- 2. Stress Line [Option ID = 11028]
- 3. Spring Line [Option ID = 11027]
- 4. Pressure Line [Option ID = 11026]

Correct Answer:-

• Tunnel Line [Option ID = 11025]