

## 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  $85^\circ$  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.  $Al^{3+}$  [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]
2.  $<0.03$  nm [Option ID = 11137]
3.  $0.4 \mu m$  to  $0.7 \mu m$  [Option ID = 11139]
4.  $0.7 \mu m$  to  $3 \mu m$  [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]
4. 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 that .....is 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.  $\text{Na}^{+2}$  has higher residency time compared to  $\text{Ca}^{+2}$  [Option ID = 10916]
2.  $\text{Na}^{+}$  and  $\text{Cl}^{-}$  are most abundant cation and anion in seawater. [Option ID = 10913]
3.  $\text{Ca}^{+2}$  is less abundant in sea water than  $\text{Na}^{+2}$  [Option ID = 10915]
4.  $\text{Na}^{+2}$  is abundant but  $\text{Cl}^{-}$  is less abundant. [Option ID = 10914]

**Correct Answer :-**

- $\text{Na}^{+}$  and  $\text{Cl}^{-}$  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-sorting, angular grains [Option ID = 11088]
4. No clay, well-sorting, 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]**

1. 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]

**Correct Answer :-**

- 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. Conrad 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 Vindhya [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. biostratigraphy [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 twinning 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]

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1.  $\text{KAlSi}_2\text{O}_8$  [Option ID = 11059]
2.  $\text{KAlSi}_2\text{O}_6$  [Option ID = 11060]
3.  $\text{KAlSi}_3\text{O}_8$  [Option ID = 11057]
4.  $\text{KAl}_2\text{Si}_3\text{O}_8$  [Option ID = 11058]

**Correct Answer :-**

- $\text{KAlSi}_3\text{O}_8$  [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, 610 °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]

**Correct Answer :-**

- 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. Ceratite [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]
2. Dense coal with more than 90% carbon [Option ID = 10880]
3. 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 = 11195]
2. Pyrite [Option ID = 11197]
3. Orthoclase [Option ID = 11200]
4. Aragonite [Option ID = 11198]

**Correct Answer :-**

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

**Correct Answer :-**

- Kerguelan [Option ID = 11161]

**52) Assertion (A): Tetrapods are vertebrates but some vertebrates are not tetrapods  
Reasoning (R): 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]
2. Tide dominated delta [Option ID = 10895]
3. Wave dominated delta [Option ID = 10894]

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. Atrypa [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 CO<sub>2</sub> and lower Mg/Ca ratio [Option ID = 10889]
2. Aragonite ooids due to lower CO<sub>2</sub> and higher Mg/Ca ratio [Option ID = 10891]
3. Calcite ooids due to lower CO<sub>2</sub> and lower Mg/Ca ratio [Option ID = 10892]
4. Calcitic ooids due to higher CO<sub>2</sub> and higher Mg/Ca ratio [Option ID = 10890]

Correct Answer :-

**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]

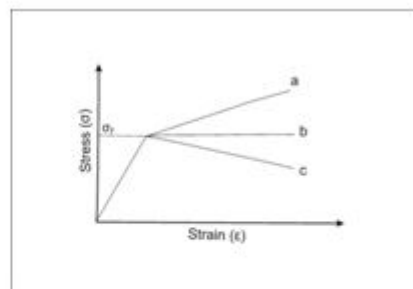
**65) Coral reefs are generally found in [Question ID = 2726]**

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 \_\_\_\_\_ in India. [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]
3. 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]**

1. Terebratula [Option ID = 11123]
2. Spirifer [Option ID = 11122]
3. Productus [Option ID = 11124]



4. 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 characteristic of lignite? [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.  $^{210}\text{Pb}$  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]

**Correct Answer :-**

- 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 :-**



**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 :-**



**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]