www.FirstRanker.com

DU MSc Geology

Topic:- DU_J18_MSC_GEO_Topic01

- 1) If the Earth's axis of rotation were not tilted, which one of the following statements would be true? [Question ID = 5080]
- 1. The poles will have daylight for six months [Option ID = 20319]
- 2. There will be no seasons [Option ID = 20320]
- 3. Equal day and night at all places throughout the year [Option ID = 20317]
- 4. Duration of day and night will depend on latitude but will not change with time [Option ID = 20318]

Correct Answer :-

- There will be no seasons [Option ID = 20320]
- 2) Which of the following doesn't control aquifer behaviour?

[Question ID = 5094]

- 1. Structural disposition [Option ID = 20375]
- 2. Precipitation [Option ID = 20376]
- 3. Wind conditions [Option ID = 20373]
- 4. Nature of the rock [Option ID = 20374]

Correct Answer:-

- Wind conditions [Option ID = 20373]
- 3) Which of the following sequences correctly depict increase in deformation and grade of metamorphism?

[Question ID = **5116**]

- 1. Charnockite-> Chlorite schist -> Slate -> Hornblende gneiss [Option ID = 20463]
- 2. Slate -> Chlorite schist -> Charnockite-> Hornblende gneiss [Option ID = 20462]
- 3. Slate -> Chlorite schist -> Hornblende gneiss -> Charnockite [Option ID = 20464]
- 4. Chlorite schist -> Slate -> Hornblende gneiss -> Charnockite [Option ID = 20461]

Correct Answer :-

- Slate -> Chlorite schist -> Hornblende gneiss -> Charnockite [Option ID = 20464]
- 4) Which ocean current is not part of the oceanic gyre?

[Question ID = 5035]

- 1. Kuroshio [Option ID = 20138]
- 2. Antarctic circumpolar current [Option ID = 20140]
- 3. Gulf stream [Option ID = 20137]
- 4. North equatorial current [Option ID = 20139]

Correct Answer:-

- Antarctic circumpolar current [Option ID = 20140]
- 5) Which one of the following ocean is decreasing in its total area for the past few million years

[Question ID = **5034**]

- 1. Atlantic ocean [Option ID = 20133]
- 2. Pacific ocean [Option ID = 20134]
- 3. Indian ocean [Option ID = 20136]
- 4. Red sea [Option ID = 20135]

Correct Answer:-

• Pacific ocean [Option ID = 20134]

www.FirstRanker.com

[Question ID = **5063**]

- 1. an erosional feature formed at the top of bed at high energy condition [Option ID = 20252]
- 2. an erosional feature formed by movement of tools at high energy condition [Option ID = 20251]
- 3. an erosional feature found at the sole of bed formed at very high energy condition [Option ID = 20249]
- 4. a depositional feature found at bed top [Option ID = 20250]

Correct Answer :-

• an erosional feature found at the sole of bed formed at very high energy condition [Option ID = 20249]

7) The mass wasting is primarily related to: [Question ID = 5048]

- 1. Type of rock [Option ID = 20190]
- 2. Water [Option ID = 20192]
- 3. Gravitational instability [Option ID = 20191]
- 4. Dip slope [Option ID = 20189]

Correct Answer:-

• Gravitational instability [Option ID = 20191]

8) In response to the expansion of grasslands, mammals evolved

[Question ID = **5033**]

- 1. hypsodont dentition [Option ID = 20132]
- 2. bunodont dentition [Option ID = 20130]
- 3. brachydont dentition [Option ID = 20129]
- 4. selonodont dentition [Option ID = 20131]

Correct Answer :-

• hypsodont dentition [Option ID = 20132]

9) Pycnocline indicates the vertical distribution of [Question ID = 5032]

- 1. Salinity [Option ID = 20126]
- 2. Oxygen in the ocean water [Option ID = 20128]
- 3. Density [Option ID = 20127]
- 4. Temperature [Option ID = 20125]

Correct Answer :-

• Density [Option ID = 20127]

10) Most ore minerals are represented by [Question ID = 5108]

- 1. Native elements and oxides [Option ID = 20431]
- 2. Oxides and carbonates [Option ID = 20432]
- 3. Silicates and oxides [Option ID = 20429]
- 4. Sulfides and oxides [Option ID = 20430]

Correct Answer:-

• Sulfides and oxides [Option ID = 20430]

11) The dynamically metamorphosed rock produced by localized frictional heating and shear melting is referred as: [Question ID = 5117]

- 1. Pseudotachylite [Option ID = 20466]
- 2. Mylonite [Option ID = 20467]
- 3. Enderbite [Option ID = 20465]
- 4. Leptynite [Option ID = 20468]

Correct Answer:-

• Pseudotachylite [Option ID = 20466]

12) The mineral having highest hardness amongst following is [Question ID = 5103]

- 1. Calcite [Option ID = 20411]
- 2. Graphite [Option ID = 20409]
- 3. Quartz [Option ID = 20412]
- 4. Corundum [Option ID = 20410]



| Corundum [Option ID = 20410] |
|---|
| 13) A base level is: [Question ID = 5086] |
| the lowest elevation to which a stream can cut its channel [Option ID = 20343] a field marker that indicates a lake level [Option ID = 20344] a device for measuring stream gradient [Option ID = 20341] a device for measuring stream discharge [Option ID = 20342] |
| Correct Answer :- • the lowest elevation to which a stream can cut its channel [Option ID = 20343] |
| 14) Which form resembles human kidney? [Question ID = 5087] |
| 1. Granular [Option ID = 20347] 2. Reniform [Option ID = 20346] 3. Mammillary [Option ID = 20348] 4. Globular [Option ID = 20345] |
| Correct Answer :- • Reniform [Option ID = 20346] |
| 15) A ⁴ He nucleus that escapes from a decaying heavy radiogenic isotope is called [Question ID = 5084] |
| 1. X- ray [Option ID = 20335] 2. Alpha particle [Option ID = 20333] 3. Beta particle [Option ID = 20336] 4. Gamma ray photon [Option ID = 20334] |
| Correct Answer :- • Alpha particle [Option ID = 20333] |
| 16) What percentage of the earth's water is fresh water? [Question ID = 5079] |
| 1. 50% [Option ID = 20313] 2. 22% [Option ID = 20314] 3. 7% [Option ID = 20315] 4. 3% [Option ID = 20316] |
| Correct Answer :- • 3% [Option ID = 20316] |
| 17) Past seawater temperature can be reconstructed from the |
| [Question ID = 5040] |
| 1. Oxygen isotopic composition of the calcareous foraminifera [Option ID = 20157] 2. All of the these [Option ID = 20160] 3. Carbon isotopic composition of agglutinated foraminifera [Option ID = 20159] 4. Carbon isotopic composition of the calcareous foraminifera [Option ID = 20158] |
| Correct Answer :- • Oxygen isotopic composition of the calcareous foraminifera [Option ID = 20157] |
| 18) The term "neotectonics" is related to earth movements during: [Question ID = 5052] |
| 1. Permian [Option ID = 20206] 2. Quaternary [Option ID = 20207] 3. Triassic [Option ID = 20208] 4. Cretaceous [Option ID = 20205] |
| Correct Answer :- • Quaternary [Option ID = 20207] |
| 19) The Bushveld Complex represents world's largest reserve of [Question ID = 5098] 1. Platinum Group Elements [Option ID = 20391] 2. Rare Earth Elements [Option ID = 20392] 3. Gold [Option ID = 20389] |

www.FirstRanker.com

4. Lithium [Option ID = 20390] Correct Answer :-• Platinum Group Elements [Option ID = 20391] 20) An erosional surface separates sedimentary strata dipping 60° towards N80°E from the overlying strata dipping 5° towards N45°E. The structure is called: [Question ID = 5068]

1. disconformity [Option ID = 20269]

- 2. paraconformity [Option ID = 20272]
- 3. non-conformity [Option ID = 20270]
- 4. angular unconformity [Option ID = 20271]

Correct Answer :-

• angular unconformity [Option ID = 20271]

21) Marble is a type of metamorphic rock that originates from: [Question ID = 5121]

- 1. Limestone [Option ID = 20482]
- 2. Sandstone [Option ID = 20483]
- 4. Granite [Option ID = 20484]

Correct Answer:-

• Limestone [Option ID = 20482]

22) What will be the effect of glacial period on the average salinity of the ocean [Question ID = 5027]

- 1. Increased [Option ID = 20105]
- 2. was the highest in the Indian Ocean [Option ID = 20108]
- 3. Decreased [Option ID = 20106]
- 4. No change [Option ID = 20107]

Correct Answer:-

• Increased [Option ID = 20105]

23) Sea water is saline because: [Question ID = 5039]

- 1. Na^{+2} is abundant but Cl^{-} is less abundant. [Option ID = 20154]
- 2. Na^{+2} has higher residence time compared to Ca^{+2} [Option ID = 20156]
- 3. Na^{+} and Cl^{-} are most abundant cation and anion in seawater. [Option ID = 20153]
- 4. Ca^{+2} is less abundant in sea water than Na^{+2} [Option ID = 20155]

Correct Answer:

• Na^{+2} has higher residence time compared to Ca^{+2} [Option ID = 20156]

24) Law of constancy of interfacial angles is also known as

[Question ID = **5104**]

- 1. Steno's law [Option ID = 20414]
- 2. Snell's Law [Option ID = 20416]
- 3. Bragg's law [Option ID = 20413]
- 4. Pauling's rule [Option ID = 20415]

Correct Answer:-

• Steno's law [Option ID = 20414]

25) Species with narrow range of salinity tolerance are known as [Question ID = 5043]

- 1. none of these [Option ID = 20172]
- 2. Euryhaline [Option ID = 20170]
- 3. Stenohaline [Option ID = 20169]
- 4. Oligohaline [Option ID = 20171]

Correct Answer :-



| 26) A 'pancake'- shaped oblate strain ellipsoid is characteristic of: |
|---|
| [Question ID = 5066] |
| plane-strain deformation [Option ID = 20261] flattening deformation [Option ID = 20262] none of these. [Option ID = 20264] constrictional deformation [Option ID = 20263] |
| Correct Answer :- • flattening deformation [Option ID = 20262] |
| 27) The most important oil producing horizon in India's "Bombay High" is of [Question ID = 5082] 1. Miocene age [Option ID = 20325] 2. Proterozoic age [Option ID = 20327] 3. Paleocene age [Option ID = 20326] 4. Mesozoic age [Option ID = 20328] |
| Correct Answer :- • Miocene age [Option ID = 20325] |
| 28) Rocks produced by impact metamorphism may contain newly formed crystals of [Question ID = 5122] 1. Lawsonite [Option ID = 20485] 2. Apatite [Option ID = 20487] 3. Tremolite [Option ID = 20486] 4. Stishovite [Option ID = 20488] |
| Correct Answer :- • Stishovite [Option ID = 20488] |
| 29) Enrichment of LILE-LREE and depletion of HFSE is commonly observed in: [Question ID = 5107] 1. Island Arc Basalt [Option ID = 20427] 2. Alkaline Basalt [Option ID = 20428] 3. Mid Oceanic Ridge Basalt (MORB) [Option ID = 20425] 4. Oceanic Island Basalt (OIB) [Option ID = 20426] |
| Correct Answer :- • Island Arc Basalt [Option ID = 20427] |
| 30) Gyres in the oceans are formed due to [Question ID = 5026] 1. Salinity difference in water across latitude [Option ID = 20102] 2. Oceanic upwelling [Option ID = 20104] 3. Coriolis effect [Option ID = 20103] 4. Temperature difference in water across latitude [Option ID = 20101] |
| Correct Answer :- • Coriolis effect [Option ID = 20103] |
| 31) Most dense seawater is present in the [Question ID = 5031] 1. Antarctic bottom water [Option ID = 20124] 2. Arctic bottom water [Option ID = 20121] 3. North Pacific bottom water [Option ID = 20122] 4. North Atlantic deep water [Option ID = 20123] |
| Correct Answer :- • Antarctic bottom water [Option ID = 20124] |
| 32) A lenticular clast-supported conglomerate bed with concave-up base and planar top can be explained as product of [Question ID = |



www.FirstRanker.com

2. Channel lag [Option ID = 20260]
3. Debris flow [Option ID = 20257]
4. Slump [Option ID = 20258]

Correct Answer :• Channel lag [Option ID = 20260]

33) A cleavage that forms along the axial planes of folds on an earlier cleavage is known as:

[Question ID = 5078]

1. crenulation cleavage [Option ID = 20309]
2. slaty cleavage [Option ID = 20310]
3. none of these. [Option ID = 20312]
4. disjunctive cleavage [Option ID = 20311]

Correct Answer:-

• crenulation cleavage [Option ID = 20309]

34) Collision of India and Asia occurred around:

[Question ID = 5049]

- 1. ~15 Ma [Option ID = 20193]
- 2. ~30 Ma [Option ID = 20194]
- 3. ~65 Ma [Option ID = 20196]
- 4. ~55 Ma [Option ID = 20195]

Correct Answer:-

• ~55 Ma [Option ID = 20195]

35) India is one of the major producer of ores of; [Question ID = 5092]

- 1. Manganese [Option ID = 20367]
- 2. Lead-zinc [Option ID = 20368]
- 3. Gold [Option ID = 20365]
- 4. Diamond [Option ID = 20366]

Correct Answer :-

• Manganese [Option ID = 20367]

36) Resistivity sounding in groundwater exploration estimates :

[Question ID = **5109**]

- 1. Both (a) & (b) [Option ID = 20435]
- 2. Horizontal variation in resistivity [Option ID = 20434]
- 3. Variation of resistivity with depth [Option ID = 20433]
- 4. None of these [Option ID = 20436]

Correct Answer:-

Variation of resistivity with depth [Option ID = 20433]

37) Remote sensing techniques commonly make use of the properties of -----emitted, reflected or diffracted by the sensed objects:

[Question ID = 5102]

- 1. Sound waves [Option ID = 20406]
- 2. Electric waves [Option ID = 20405]
- 3. Electromagnetic waves [Option ID = 20407]
- 4. Wind waves [Option ID = 20408]

Correct Answer:

• Electromagnetic waves [Option ID = 20407]

38) Positive Eu anomaly in a rock indicates :

www.FirstRanker.com

- 1. Fractionation of plagioclase [Option ID = 20453]
- 2. Fractionation of olivine [Option ID = 20455]
- 3. Accumulation of plagioclase [Option ID = 20454]
- 4. Accumulation of olivine + pyroxene [Option ID = 20456]

Correct Answer:-

• Accumulation of plagioclase [Option ID = 20454]

39) The chemical composition of orthoclase is; [Question ID = 5089]

- 1. Ca Al Si_3O_8 [Option ID = 20354]
- 2. K Al O_8 [Option ID = 20353]
- 3. Ca Al O_8 [Option ID = 20356]
- 4. K Al $Si_3 O_8$ [Option ID = 20355]

Correct Answer:

• K Al Si₃ O₈ [Option ID = 20355]

40) The drainage pattern in areas with folded sedimentary rocks is known as: [Question ID = 5055]

- 1. Parallel [Option ID = 20218]
- 2. Annular [Option ID = 20220]
- 3. Dendritic [Option ID = 20217]
- 4. Trellis [Option ID = 20219]

Correct Answer:-

• Trellis [Option ID = 20219]

41) We get epsilon cross-stratification in [Question ID = 5064]

- 1. Point bar deposit of meandering river [Option ID = 20254]
- 2. Aggrading bar deposit of anastomosing river [Option ID = 20256]
- 3. Transverse bar deposit of meandering river [Option ID = 20255]
- 4. Longitudinal bar deposit of braided river [Option ID = 20253]

Correct Answer:-

• Point bar deposit of meandering river [Option ID = 20254]

42) We get botryoidal cement in carbonate rocks when there is [Question ID = 5058]

- 1. Deep burial diagenesis [Option ID = 20232]
- 2. Sea floor diagenesis [Option ID = 20229]
- 3. Phreatic diagenesis [Option ID = 20231]
- 4. Vadose diagenesis [Option ID = 20230]

Correct Answer:-

• Sea floor diagenesis [Option ID = 20229]

43) The quantity of water that can be withdrawn annually and also the rate at which this withdrawal could be made without adversely affecting the inventory of the aquifer is called [Question ID = 5095]

- 1. Annual yield [Option ID = 20377]
- 2. Percent yield [Option ID = 20378]
- 3. Operational vield [Option ID = 20379]
- 4. Monthly yield [Option ID = 20380]

Correct Answer:-

• Operational yield [Option ID = 20379]

44) Gingko is a

[Question ID = **5062**]

- 1. living fossil [Option ID = 20246]
- 2. vertebrate fossil [Option ID = 20248]
- 3. invertebrate fossil [Option ID = 20247]
- 4. index fossil [Option ID = 20245]



www.FirstRanker.com

• living fossil [Option ID = 20246]

45) A cross-stratified sandstone bed is a

[Question ID = 5056]

- 1. Diachronous unit formed by bedform migration [Option ID = 20223]
- 2. Diachronous unit formed by bedform aggradation [Option ID = 20224]
- 3. Synchronous unit formed by beform migration [Option ID = 20222]
- 4. Synchronous unit formed by crossing of two bedforms [Option ID = 20221]

Correct Answer:-

• Diachronous unit formed by bedform migration [Option ID = 20223]

46) Below CCD which of following will not occur - [Question ID = 5081]

- 1. Siliceous oozes [Option ID = 20321]
- 2. Radiolaria [Option ID = 20324]
- 3. Calcareous oozes, Foraminifera [Option ID = 20322]
- 4. Diatoms [Option ID = 20323]

Correct Answer :-

• Calcareous oozes, Foraminifera [Option ID = 20322]

47) If two distinctly unrelated groups develop same morphological traits, the mode of evolution is known as [Question ID = 5061]

- 1. convergent evolution [Option ID = 20243]
- 2. parallel evolution [Option ID = 20241]
- 3. monophyletic group [Option ID = 20244]
- 4. divergent evolution [Option ID = 20242]

Correct Answer:-

• convergent evolution [Option ID = 20243]

48) A fine powdery rock flour produced by abrasion and milling along a brittle fault surface is called: [Question ID = 5106]

- 1. none of the above. [Option ID = 20424]
- 2. cataclasite [Option ID = 20421]
- 3. breccia [Option ID = 20423]
- 4. gouge [Option ID = 20422]

Correct Answer:-

• gouge [Option ID = 20422]

49) The continental rise is: [Question ID = 5037]

- 1. a portion of the mid-ocean ridge. [Option ID = 20147]
- 2. a flat-topped seamount. [Option ID = 20148]
- 3. an uplifted portion of the continent [Option ID = 20146]
- 4. a wedge of sediment at the base of the continental slope. [Option ID = 20145]

Correct Answer :-

- a wedge of sediment at the base of the continental slope. [Option ID = 20145]

50) The concept of punctuated equilibrium was proposed by [Question ID = 5125]

- 1. William Smith & Nicholas Steno [Option ID = 20500]
- 2. James Hutton & Charles Lyell [Option ID = 20497]
- 3. Niels Eldredge & Stephen Gould [Option ID = 20498]
- 4. Charles Darwin & Alfred Russell Wallace [Option ID = 20499]

Correct Answer :-

• Niels Eldredge & Stephen Gould [Option ID = 20498]

51) Darcy's law states that

[Question ID = 5045]

1. Velocity is inversely proportional to hydraulic gradient [Option ID = 20178]



www.FirstRanker.com

- 2. Velocity is directly proportional to hydraulic gradient [Option ID = 20177]
- 3. Velocity is not related to the hydraulic gradient [Option ID = 20179]
- 4. None of these. [Option ID = 20180]

Correct Answer:-

• Velocity is directly proportional to hydraulic gradient [Option ID = 20177]

52) In steady state groundwater flow situation, the geometry of cone of depression:

[Question ID = **5047**]

- 1. Does not change with time [Option ID = 20186]
- 2. Fluctuates [Option ID = 20187]
- 3. Changes with time [Option ID = 20185]
- 4. None of these [Option ID = 20188]

Correct Answer:-

• Does not change with time [Option ID = 20186]

53) To look for U deposit we should explore: [Question ID = 5060]

- 1. Limestone country [Option ID = 20239]
- 2. Ultramafic suites of rocks [Option ID = 20237]
- 3. Ocean floor rocks [Option ID = 20240]
- 4. Granitic suite of rocks [Option ID = 20238]

Correct Answer:-

• Granitic suite of rocks [Option ID = 20238]

54) The sea level was approximately lowered during the last glacial maximum relative to the present around [Question ID = 5028]

- 1. 1000m [Option ID = 20112]
- 2. 100m [Option ID = 20109]
- 3. 500m [Option ID = 20111]
- 4. 400m [Option ID = 20110]

Correct Answer:-

• 100m [Option ID = 20109]

55) Aragonite and calcite have same chemical composition. These represent; [Question ID = 5085]

- 1. Polytypism [Option ID = 20337]
- 2. None of the above [Option ID = 20340]
- 3. Polymorphism [Option ID = 20338]
- 4. Pseudomorphism [Option ID = 20339]

Correct Answer:-

• Polymorphism [Option ID = 20338]

56) In one limb of a map-scale fold, the axial plane cleavage dips at a shallower angle than the bedding. The fold is: [Question ID = 5073]

- 1. a sheath fold [Option ID = 20291]
- 2. a reclined fold [Option ID = 20290]
- 3. an overturned fold [Option ID = 20292]
- 4. an upright fold [Option ID = 20289]

Correct Answer:-

• an overturned fold [Option ID = 20292]

57) The longitudinal seismic waves are; [Question ID = 5100]

- 1. Rayleigh waves [Option ID = 20399]
- 2. Secondary waves [Option ID = 20398]
- 3. Love waves [Option ID = 20400]
- 4. Primary waves [Option ID = 20397]

Correct Answer :-

Primary waves [Option ID = 20397]

www.FirstRanker.com

58) The SI unit of specific gravity is [Question ID = 5088] 1. Ohm [Option ID = 20349] 2. N/cc [Option ID = 20351] 3. No unit [Option ID = 20352] 4. g/cc [Option ID = 20350] Correct Answer :-• No unit [Option ID = 20352] 59) Total dissolved solutes of groundwater is a direct function of [Question ID = **5042**] 1. Electrical conductivity of the water [Option ID = 20167] 2. Intrinsic permeability of the formation [Option ID = 20165] 3. Storativity of the formation [Option ID = 20166] 4. None of these [Option ID = 20168] Correct Answer :-• Electrical conductivity of the water [Option ID = 20167] 60) The best grade chromite in India occurs in which state? [Question ID = 5093] 1. Rajasthan [Option ID = 20370] 2. Karnataka [Option ID = 20369] 3. Kerala [Option ID = 20372] 4. Orissa [Option ID = 20371] Correct Answer :-• Orissa [Option ID = 20371] 61) The vast sandy desert covering ~40% of Sahara and Arabian desert are known as sand seas or: [Question ID = 5054] 1. Playas [Option ID = 20213] 2. Erg [Option ID = 20215] 3. Reg [Option ID = 20214] 4. Bajada [Option ID = 20216] Correct Answer :-• Erg [Option ID = 20215] 62) The term "ablation" in glacial geomorphology refers to [Question ID = 5053] 1. Equilibrium [Option ID = 20211] 2. None of the these. [Option ID = 20212] 3. Losses [Option ID = 20209] 4. Accumulation [Option ID = 20210] **Correct Answer:-**• Losses [Option ID = 20209] 63) The root system of crops in water-logged areas get [Question ID = 5097] 1. Photosynthesised [Option ID = 20387] 2. Enriched with nutrients [Option ID = 20386] 3. Growth inhibited [Option ID = 20388]

- Correct Answer :-
- Decomposed [Option ID = 20385]

4. Decomposed [Option ID = 20385]

- 64) A discontinuous cleavage formed by selective dissolution of material along parallel planes, is called: [Question ID = 5070]
- 1. crenulation cleavage [Option ID = 20279]
- 2. slaty cleavage [Option ID = 20278]
- 3. disjunctive cleavage [Option ID = 20277]
- 4. transected cleavage. [Option ID = 20280]



www.FirstRanker.com

| disjunctive cleavage [Option ID = 20277] |
|--|
| 65) Nunatac refers to a landform found in [Question ID = 5124] |
| Barren granitic terrain [Option ID = 20495] Eolian environment [Option ID = 20494] Alluvial environment [Option ID = 20493] Glacial environment [Option ID = 20496] |
| Correct Answer :- • Glacial environment [Option ID = 20496] |
| 66) The texture is characteristic of rocks rich in acicular minerals whose orientation commonly defines an elongation lineation. [Question ID = 5119] |
| 1. Nematoblastic [Option ID = 20473] 2. Saccharoidal [Option ID = 20475] 3. Helicitic [Option ID = 20474] 4. Mortar [Option ID = 20476] |
| Correct Answer :- • Nematoblastic [Option ID = 20473] |
| 67) The lower 10 km of the atmosphere where most weather occurs is called: [Question ID = 5038] |
| Stratosphere [Option ID = 20150] Ionosphere [Option ID = 20151] Thermosphere [Option ID = 20152] Troposphere [Option ID = 20149] |
| Correct Answer :- • Troposphere [Option ID = 20149] |
| 68) The development of complex suture pattern in Ammonoid reflected the [Question ID = 5083] |
| Changing sea water salinity [Option ID = 20330] Changing sea water temperature [Option ID = 20331] Changing sea water acidity [Option ID = 20332] Changing sea floor bathymetry [Option ID = 20329] |
| Correct Answer :- • Changing sea floor bathymetry [Option ID = 20329] |
| 69) El Nino southern oscillation is an |
| [Question ID = 5036] |
| Oceanic- atmospheric process [Option ID = 20143] Oceanic- atmospheric- land process [Option ID = 20144] Oceanic process [Option ID = 20141] Atmospheric process [Option ID = 20142] |
| Correct Answer :- • Oceanic- atmospheric process [Option ID = 20143] |
| 70) Saurischian and ornithischian dinosaurs are distinguished primarily by their [Question ID = 5072] |
| Food habit [Option ID = 20287] Pelvic structure [Option ID = 20285] Mode of locomotion [Option ID = 20286] Skull morphology [Option ID = 20288] |
| Correct Answer :- • Pelvic structure [Option ID = 20285] |
| 71) We are unlikely to construct a dam when; [Question ID = 5096] |
| 1. the rocks are porous [Option ID = 20383] |
| 2. the rocks are weathered to a certain extent [Option ID = 20384] |

www.FirstRanker.com

- 3. the rocks are strong [Option ID = 20381]
- 4. the rocks are impermeable [Option ID = 20382]

Correct Answer:-

• the rocks are porous [Option ID = 20383]

72) Force acting perpendicular to a plane will generate a stress, which will be:

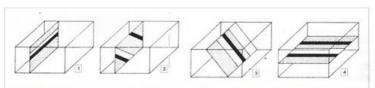
[Question ID = **5075**]

- 1. shear stress [Option ID = 20298]
- 2. Normal stress [Option ID = 20297]
- 3. none of these. [Option ID = 20300]
- 4. both normal and shear stresses [Option ID = 20299]

Correct Answer :-

• Normal stress [Option ID = 20297]

73)



The above diagrams show the striping lineation (trace of bedding on axial plane cleavage) related to different types of fold. Identify the right combination of fold types from below:

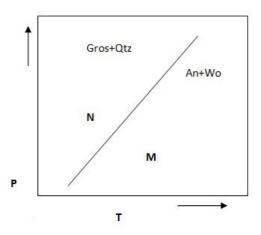
[Question ID = 5069]

- 1. 1) Recumbent fold, 2) Reclined fold, 3) Neutral fold, 4) Upright fold [Option ID = 20275]
- 2. 1) Reclined fold, 2) Recumbent fold, 3) Upright fold, 4) Inclined plunging fold [Option ID = 20276]
- 3. 1) Non plunging inclined fold, 2) Reclined fold, 3) Plunging inclined fold, 4)Neutral fold [Option ID = 20273]
- 4. 1) Non plunging upright fold, 2) Plunging upright fold, 3) Reclined fold, 4)Recumbent fold [Option ID = 20274]

Correct Answer:-

• 1) Non plunging upright fold, 2) Plunging upright fold, 3) Reclined fold, 4)Recumbent fold [Option ID = 20274]

74) In the following diagram where will be the assemblage Gros+Qtz+Wo+An will be possible.



[Question ID = 5112]

- 1. In field M [Option ID = 20446]
- 2. On the univariant line [Option ID = 20447]
- 3. Nowhere [Option ID = 20448]
- 4. In field N [Option ID = 20445]

Correct Answer :

www.FirstRanker.com

- 75) Choose the correct order of assemblages for the metapelitic rocks in a progrde Barrovian sequence:
 - I. Staurolite + kyanite + biotite + muscovite
 - II. Garnet+Muscovite+biotite+chlorite
 - III. Cordierite + sillimanite + K-feldspar+quartz
 - IV. Chlorite + muscovite + biotite + albite

Pick out the correct sequence representing successively higher grade of metamorphism:

[Question ID = 5118]

- 1. II- IV I III [Option ID = 20472]
- 2. II I III IV [Option ID = 20471
- 3. I III -IV -II [Option ID = 20469]
- 4. IV II- I III [Option ID = 20470]

Correct Answer:-

• IV - II- I - III [Option ID = 20470]

76) Spinifex texture indicates:

[Question ID = 5115]

- 1. Very slow cooling of magma in plutonic conditions [Option ID = 20457]
- 2. Rapid cooling of magma as lava flows [Option ID = 20458]
- 3. Intermediate cooling in dykes [Option ID = 20459]
- 4. None of these [Option ID = 20460]

Correct Answer:-

• Rapid cooling of magma as lava flows [Option ID = 20458]

- 77) A thin section of an igneous rock contains phenocrysts ranging in size from 2-6 mm, and a groundmass consisting of crystals less than 0.05 mm in size. This rock texture may be appropriately described as '_______ porphyritic'. [Question ID = 5123]
- 1. Fine-grained [Option ID = 20489]
- 2. Fine- to coarse-grained [Option ID = 20492]
- 3. Coarse-grained [Option ID = 20491]
- 4. Medium-grained [Option ID = 20490]

Correct Answer:-

• Fine-grained [Option ID = 20489]

78) Magmas move upward because of their

[Question ID = 5113]

- 1. Higher mafic mineral content than the surrounding rocks [Option ID = 20451]
- 2. Higher viscosity than the surrounding rocks [Option ID = 20452]
- 3. Higher silica content than the surrounding rocks [Option ID = 20450]
- 4. Lower density and higher volatile content than the adjacent solid rocks [Option ID = 20449]

Correct Answer:-

• Lower density and higher volatile content than the adjacent solid rocks [Option ID = 20449]

79) Overturned cross-stratification is formed when

[Question ID = 5057]

- 1. A cross-stratified sand bed is penecontemporaneously liquefied and operation of overriding bed-hugging current occurs [Option ID = 20227]
- 2. A cross-stratified sand bed is penecontemporaneously liquefied [Option ID = 20226]
- 3. A cross-stratified sand bed suffers overturned folding [Option ID = 20228]
- 4. A sand bed is liquefied [Option ID = 20225]

Correct Answer:

A cross-stratified sand bed is penecontemporaneously liquefied and operation of overriding bed-hugging current occurs [Option ID = 20227]

www.FirstRanker.com

80) Which of the following generally have good cleavage and react with acid [Question ID = 5110]

- 1. Carbonates [Option ID = 20439]
- 2. Oxides [Option ID = 20438]
- 3. Sulphides [Option ID = 20440]
- 4. Silicates [Option ID = 20437]

Correct Answer:-

• Carbonates [Option ID = 20439]

81) Which of the following mineral commonly occurs in metapelites? [Question ID = 5111]

- 1. Augite [Option ID = 20442]
- 2. Labradorite [Option ID = 20444]
- 3. Glaucophane [Option ID = 20441]
- 4. Muscovite [Option ID = 20443]

Correct Answer:-

• Muscovite [Option ID = 20443]

82) Which of the soil order listed below indicates advanced stage of weathering? [Question ID = 5046]

- 1. Oxisol [Option ID = 20182]
- 2. Vertisol [Option ID = 20184]
- 3. Inceptisols [Option ID = 20183]
- 4. Entisols [Option ID = 20181]

Correct Answer:-

• Oxisol [Option ID = 20182]

83) Which of the climatic zone will be marked by the least chemical weathering and the thinnest soil profiles? [Question ID = 5044]

- 1. Tropical rainforest [Option ID = 20173]
- 2. Deciduous and evergreen forests [Option ID = 20174]
- 3. Savannas [Option ID = 20176
- 4. Tundra [Option ID = 20175]

Correct Answer:-

• Tundra [Option ID = 20175]

84) Which one of the following current flows equatorward [Question ID = 5029]

- 1. East Australian current [Option ID = 20116]
- 2. Humboldt current [Option ID = 20115]
- 3. Leeuwin Current [Option ID = 20113]
- 4. Agulhas current [Option ID = 20114]

Correct Answer:

• Humboldt current [Option ID = 20115]

85) Which one of the following ocean current is relatively different from other currents [Question ID = 5030]

- 1. California current [Option ID = 20118]
- 2. West Australian current [Option ID = 20120]
- 3. Kuroshio current [Option ID = 20119]
- 4. Circumpolar current [Option ID = 20117]

Correct Answer :-

• Circumpolar current [Option ID = 20117]

86) Tungsten is mainly extracted in India from [Question ID = 5091]

- 1. Rajasthan [Option ID = 20364]
- 2. Karnataka [Option ID = 20361]
- 3. Gujarat [Option ID = 20363]
- 4. Kerala [Option ID = 20362]

Correct Answer :-

Rajasthan [Option ID = 20364]

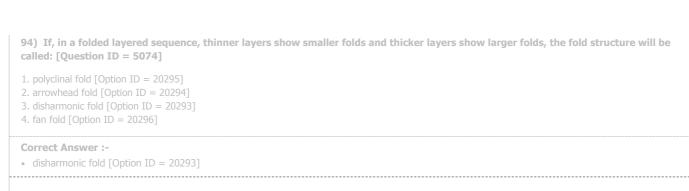


www.FirstRanker.com www.FirstRanker.com

| 87) Amphibole and biotite are commonly absent in rocks of facies [Question ID = 5120] |
|---|
| 1. Blueschist [Option ID = 20480] 2. Granulite [Option ID = 20479] 3. Faidate appriliability [Option ID = 20470] |
| 3. Epidote-amphibolite [Option ID = 20478] 4. Greenschist [Option ID = 20477] |
| Correct Answer :- • Granulite [Option ID = 20479] |
| 88) Which mineral will be first to crystallize from a silicate melt [Question ID = 5105] |
| 1. Biotite [Option ID = 20419] 2. Diopside [Option ID = 20417] 3. Quartz [Option ID = 20420] 4. Enstatite [Option ID = 20418] |
| Correct Answer :- • Enstatite [Option ID = 20418] |
| 89) Formation of clay minerals through weathering of feldspars is related to : [Question ID = 5041] |
| 1. Chelation [Option ID = 20164] 2. Sheeting [Option ID = 20163] |
| 3. Hydrolysis [Option ID = 20162] 4. Thermal expansion [Option ID = 20161] |
| Correct Answer :- • Hydrolysis [Option ID = 20162] |
| 90) Formation of permanent ice sheets over Antarctic region began at: [Question ID = 5051] |
| 1. Late Oligocene [Option ID = 20203] 2. Palaeocene [Option ID = 20201] 3. Early Eocene [Option ID = 20202] 4. Early Oligocene [Option ID = 20204] |
| Correct Answer :- • Early Oligocene [Option ID = 20204] |
| 91) Which is the most common ore of lead? [Question ID = 5090] |
| 1. Bauxite [Option ID = 20360] 2. Sphalerite [Option ID = 20357] |
| 3. Galena [Option ID = 20358] 4. Chromite [Option ID = 20359] |
| Correct Answer :- • Galena [Option ID = 20358] |
| 92) According to Anderson's theory of faulting, the Earth's surface is assumed as a plane of: [Question ID = 5071] |
| 1. Principal strain [Option ID = 20281] 2. Principal stress [Option ID = 20282] 3. Maximum shear strain. [Option ID = 20284] 4. Maximum shear stress [Option ID = 20283] |
| Correct Answer :- • Principal stress [Option ID = 20282] |
| |
| 93) Slickenside striations on a fault plane have a pitch of 90°. The fault is: [Question ID = 5067] 1. an oblique-slip fault [Option ID = 20267] |
| 2. none of the above. [Option ID = 20268] 3. a strike-slip fault [Option ID = 20266] 4. a dip-slip fault [Option ID = 20265] |
| Correct Answer:- |
| • a dip-sip radii (Option 10 = 20203) |



www.FirstRanker.com



95) The arrangement of terrain features which provides attributes e.g. the shape, size and texture of objects, is called:

[Question ID = **5101**]

- 1. Temporal variation [Option ID = 20403]
- 2. Spatial variation [Option ID = 20402]
- 3. Spectral variation [Option ID = 20401]
- 4. None of these [Option ID = 20404]

Correct Answer:-

• Spatial variation [Option ID = 20402]

96) The two limbs of a fold, when plotted as planes on a stereographic projection, intersect each other twice – both the intersection points lying on the periphery of the stereonet, diametrically opposite to each other. The fold is

[Question ID = **5077**]

- 1. a horizontal (non-plunging) fold [Option ID = 20306]
- 2. none of these. [Option ID = 20308]
- 3. a reclined fold [Option ID = 20305]
- 4. a steeply plunging fold [Option ID = 20307]

Correct Answer:

• a horizontal (non-plunging) fold [Option ID = 20306]

97) The dihedral angle between an inclined plane and any horizontal plane is called:

[Question ID = **5076**]

- 1. heave [Option ID = 20303]
- 2. dip [Option ID = 20302]
- 3. none of these. [Option ID = 20304]
- 4. hade [Option ID = 20301]

Correct Answer :-

dip [Option ID = 20302]

98) The Palaeocene-Eocene Thermal Maxima was related to a rise of average temperature by:

[Question ID = **5050**]

- 1. $10-20^{\circ}$ C [Option ID = 20199]
- 2. $20-30^{\circ}$ C [Option ID = 20198]
- 3. 0° C [Option ID = 20197]
- 4. $5-8^{\circ}$ C [Option ID = 20200]

Correct Answer:-

• 5-8°C [Option ID = 20200]

99) The point of origin of an earthquake below the earth's surface is called [Question ID = 5099]

- 1. Isopoint [Option ID = 20394]
- 2. Focus [Option ID = 20395]
- 3. Isocentre [Option ID = 20393]
- 4. Epicentre [Option ID = 20396]



www.FirstRanker.com

• Focus [Option ID = 20395]

100) Calcite Compensation in the Atlantic ocean is at higher depth than that in the Pacific ocean, because

[Question ID = **5059**]

- 1. Atlantic Ocean is deeper than Pacific ocean [Option ID = 20233]
- 2. Surface productivity in the Atlantic Ocean is higher than that in the Pacific ocean [Option ID = 20234]
- 3. There is less hydrothermal action in the Atlantic ocean compared to the Pacific Ocean [Option ID = 20235]
- 4. Mineralogy of carbonate sediments is different between the two oceans [Option ID = 20236]

Correct Answer :-

• Surface productivity in the Atlantic Ocean is higher than that in the Pacific ocean [Option ID = 20234]