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]

6) Gutter cast is

[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. selenodont 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]

Correct Answer :-

- Corundum [Option ID = 20410]

13) A base level is: [Question ID = 5086]

1. the lowest elevation to which a stream can cut its channel [Option ID = 20343]
2. a field marker that indicates a lake level [Option ID = 20344]
3. a device for measuring stream gradient [Option ID = 20341]
4. 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]

4. Lithium [Option ID = 20390]

Correct Answer :-

- Platinum Group Elements [Option ID = 20391]

20) An erosional surface separates sedimentary strata dipping 60^0 towards $N80^0E$ from the overlying strata dipping 5^0 towards $N45^0E$. 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]
3. Shale [Option ID = 20481]
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 :-

- Stenohaline [Option ID = 20169]

26) A 'pancake'- shaped oblate strain ellipsoid is characteristic of:

[Question ID = 5066]

1. plane-strain deformation [Option ID = 20261]
2. flattening deformation [Option ID = 20262]
3. none of these. [Option ID = 20264]
4. 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 = 5065]

1. Turbidity flow [Option ID = 20259]

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 :

[Question ID = 5114]

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 Si_3 O_8 [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 yield [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]

Correct Answer :-

- 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]

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]

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]
4. Decomposed [Option ID = 20385]

Correct Answer :-
- 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]

Correct Answer :-

• disjunctive cleavage [Option ID = 20277]

65) Nunatac refers to a landform found in [Question ID = 5124]

1. Barren granitic terrain [Option ID = 20495]
2. Eolian environment [Option ID = 20494]
3. Alluvial environment [Option ID = 20493]
4. 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]

1. Stratosphere [Option ID = 20150]
2. Ionosphere [Option ID = 20151]
3. Thermosphere [Option ID = 20152]
4. Troposphere [Option ID = 20149]

Correct Answer :-

• Troposphere [Option ID = 20149]

68) The development of complex suture pattern in Ammonoid reflected the [Question ID = 5083]

1. Changing sea water salinity [Option ID = 20330]
2. Changing sea water temperature [Option ID = 20331]
3. Changing sea water acidity [Option ID = 20332]
4. 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]

1. Oceanic- atmospheric process [Option ID = 20143]
2. Oceanic- atmospheric- land process [Option ID = 20144]
3. Oceanic process [Option ID = 20141]
4. 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]

1. Food habit [Option ID = 20287]
2. Pelvic structure [Option ID = 20285]
3. Mode of locomotion [Option ID = 20286]
4. 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]

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:

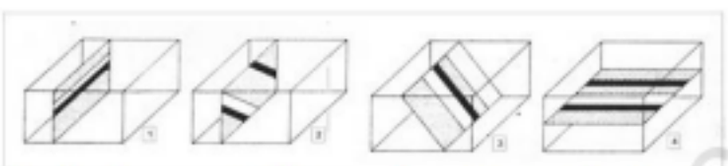
[Question ID = 5075]

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:

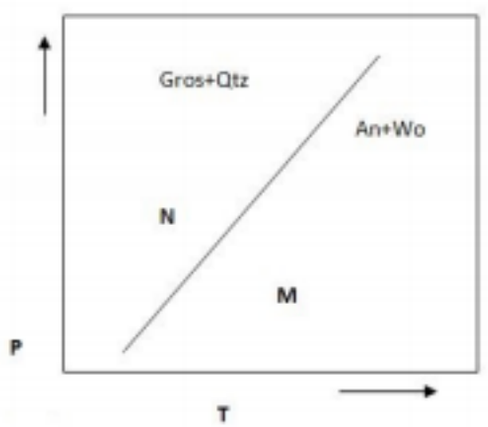
[Question ID = 5069]

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 :-

- On the univariant line [Option ID = 20447]

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]

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]

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. 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-slip fault [Option ID = 20265]

94) If, in a folded layered sequence, thinner layers show smaller folds and thicker layers show larger folds, the fold structure will be called: [Question ID = 5074]

1. polyclinal fold [Option ID = 20295]
2. arrowhead fold [Option ID = 20294]
3. disharmonic fold [Option ID = 20293]
4. fan fold [Option ID = 20296]

Correct Answer :-
- disharmonic fold [Option ID = 20293]

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

Correct Answer :-
- 5-8^{0}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]

Correct Answer :-

- 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]