

Topic:- DU\_J19\_MSC\_ES

**1) What are chionophiles? [Question ID = 12617]**

1. Organisms that can tolerate excessive salinity [Option ID = 20466]
2. Organisms that can survive very cold conditions [Option ID = 20468]
3. Organisms that can survive arid conditions [Option ID = 20465]
4. Organisms that can survive in space [Option ID = 20467]

**Correct Answer :-**

- Organisms that can survive very cold conditions [Option ID = 20468]

**2) Which of the following taxa has the most number of species?**

**[Question ID = 12538]**

1. Insects [Option ID = 20152]
2. Amphibians [Option ID = 20149]
3. Mammals [Option ID = 20150]
4. Plants [Option ID = 20151]

**Correct Answer :-**

- Insects [Option ID = 20152]

**3) Which of the following characteristics are correct for differentiating crocodiles and alligators? Choose the right combination of characters.**

- i. Crocodiles have V-shaped snout and alligators have U-shaped snout
- ii. Crocodiles have U-shaped snout and alligators have V-shaped snout
- iii. Crocodiles are generally slower than alligators
- iv. Fully grown alligators are generally larger in size than fully grown crocodiles
- v. Crocodiles are circumglobally distributed and alligators are found only in America and China

**[Question ID = 12625]**

1. ii, iv [Option ID = 20500]
2. i, iii, v [Option ID = 20498]
3. ii, iii, v [Option ID = 20499]
4. i, iii, iv [Option ID = 20497]

**Correct Answer :-**

- i, iii, v [Option ID = 20498]

**4) Which of the following types of sewage treatment is properly matched?**

**[Question ID = 12559]**

1. Primary - biological [Option ID = 20233]
2. Advanced - physical and chemical [Option ID = 20235]
3. Secondary - mechanical process [Option ID = 20234]
4. Secondary - chemical process [Option ID = 20236]

**Correct Answer :-**

- Advanced - physical and chemical [Option ID = 20235]

**5) Which of the following is most useful for combating virus infection?**

**[Question ID = 12543]**

1. Penicillin [Option ID = 20171]
2. Streptomycin [Option ID = 20169]
3. Interferon [Option ID = 20172]
4. Sulfanilamide [Option ID = 20170]

**Correct Answer :-**

- Interferon [Option ID = 20172]

**6) The branch of biology that investigates animal communication, sound production and reception in animals is referred to as:**

**[Question ID = 12527]**

1. Wildlife recording [Option ID = 20106]
2. Echolocation [Option ID = 20105]
3. Bioacoustics [Option ID = 20107]
4. Ethology [Option ID = 20108]

**Correct Answer :-**

- Bioacoustics [Option ID = 20107]

**7) In Nitrogen Cycle, soil nitrates are transformed into free nitrogen by**

**[Question ID = 12533]**

1. Both Nitrifying bacteria and Ammonifying bacteria [Option ID = 20132]
2. Nitrifying bacteria [Option ID = 20129]
3. Denitrifying bacteria [Option ID = 20130]
4. Ammonifying bacteria [Option ID = 20131]

**Correct Answer :-**

- Denitrifying bacteria [Option ID = 20130]

**8) The primary succession associated with sand-dune formation, typical in coastal areas is called**

**[Question ID = 12532]**

1. Primary succession [Option ID = 20125]
2. Psammosere [Option ID = 20128]
3. Mesosere [Option ID = 20127]
4. Hydrosere [Option ID = 20126]

**Correct Answer :-**

- Psammosere [Option ID = 20128]

**9) What term is used to describe the richness of biological variation, occurring at all levels of ecological organization?**

**[Question ID = 12528]**

1. Biosphere [Option ID = 20112]
2. Biodiversity [Option ID = 20111]
3. Species diversity [Option ID = 20110]
4. Species richness [Option ID = 20109]

**Correct Answer :-**

- Biodiversity [Option ID = 20111]

**10) An important adaptation of mangrove plants is**

**[Question ID = 12534]**

1. Vivipary [Option ID = 20136]
2. Thick leaves [Option ID = 20135]
3. Thick cuticle [Option ID = 20133]
4. Thick bark [Option ID = 20134]

**Correct Answer :-**

- Vivipary [Option ID = 20136]

**11) When certain persistent chemicals occur in their highest concentrations in top predators, it is called**

**[Question ID = 12531]**

1. Bioconcentration [Option ID = 20123]
2. Biomagnification [Option ID = 20121]
3. Biopollution [Option ID = 20124]
4. Contamination [Option ID = 20122]

**Correct Answer :-**

- Biomagnification [Option ID = 20121]

**12) Which of the following elements is NOT considered a base cation?**

**[Question ID = 12530]**

1. Magnesium [Option ID = 20119]
2. Carbon [Option ID = 20118]
3. Sodium [Option ID = 20120]
4. Calcium [Option ID = 20117]

**Correct Answer :-**

- Carbon [Option ID = 20118]

**13) The coefficient of relatedness (r) between you and your great grandfather would be?**

**[Question ID = 12529]**

1.  $1/16$  [Option ID = 20116]
2.  $1/2$  [Option ID = 20113]
3.  $1/4$  [Option ID = 20114]
4.  $1/8$  [Option ID = 20115]

**Correct Answer :-**

- $1/8$  [Option ID = 20115]

**14) The dominant soil type in India is**

**[Question ID = 12554]**

1. Mountain soil [Option ID = 20216]
2. Red soil [Option ID = 20213]
3. Sandy soil [Option ID = 20215]
4. Black soil [Option ID = 20214]

**Correct Answer :-**

**15) A cell is grown in a medium containing radioactive thymidine for one generation cycle. Afterwards the cell's progeny (i.e. two daughter cells) are transferred to non-radioactive medium for three more generations. This yields 16 cells. How many cells out of 16 will have radioactive DNA?**

**[Question ID = 12548]**

1. Two cells [Option ID = 20191]
2. Four cells [Option ID = 20192]
3. All the cells [Option ID = 20189]
4. One cell only [Option ID = 20190]

**Correct Answer :-**

- Two cells [Option ID = 20191]

**16) Which of the following fuels causes minimum environmental pollution?**

**[Question ID = 12558]**

1. Kerosene [Option ID = 20232]
2. Diesel [Option ID = 20231]
3. Hydrogen [Option ID = 20230]
4. Coal [Option ID = 20229]

**Correct Answer :-**

- Hydrogen [Option ID = 20230]

**17) Which of the following form of Coal has the maximum percentage of heat content by weight?**

**[Question ID = 12551]**

1. Lignite [Option ID = 20203]
2. Sub-bituminous [Option ID = 20204]
3. Anthracite [Option ID = 20201]
4. Bituminous [Option ID = 20202]

**Correct Answer :-**

- Anthracite [Option ID = 20201]

**18) Which one of the following is a useful biological indicator of Sulphur-dioxide pollution?**

**[Question ID = 12535]**

1. Algal blooms [Option ID = 20140]
2. Lichen [Option ID = 20138]
3. Pseudomonas [Option ID = 20137]
4. Bryophytes [Option ID = 20139]

**Correct Answer :-**

- Lichen [Option ID = 20138]

**19) Burning of fossil fuel is the main cause of**

**[Question ID = 12541]**

1. Nitric oxide pollution [Option ID = 20161]
2. Nitrous oxide pollution [Option ID = 20163]
3. Nitrogen oxide pollution [Option ID = 20162]
4. Sulphur dioxide pollution [Option ID = 20164]

**Correct Answer :-**

**20) Organisms that can fix nitrogen from the air to soil are called**

**[Question ID = 12550]**

1. Autotrophs [Option ID = 20197]
2. Phototrophs [Option ID = 20200]
3. Diazotrophs [Option ID = 20199]

4. Chemotrophs [Option ID = 20198]

**Correct Answer :-**

- Diazotrophs [Option ID = 20199]

**21) Leghemoglobin is associated with**

**[Question ID = 12544]**

1. Legs of human beings [Option ID = 20175]
2. Legs of cattle [Option ID = 20176]
3. Nodulated roots of non-legumes [Option ID = 20174]
4. Nodulated roots of legumes [Option ID = 20173]

**Correct Answer :-**

- Nodulated roots of legumes [Option ID = 20173]

**22) Electroluminescent layer, a film of organic compound which emits light in response to an electric current is known as**

**[Question ID = 12570]**

1. LED [Option ID = 20278]
2. Crystal display [Option ID = 20280]
3. OLED [Option ID = 20277]
4. LCD [Option ID = 20279]

**Correct Answer :-**

- OLED [Option ID = 20277]

**23) Soybean is also useful for the production of**

**[Question ID = 12539]**

1. Sugar [Option ID = 20154]
2. Biodiesel [Option ID = 20153]
3. Lipid [Option ID = 20156]
4. Starch [Option ID = 20155]

**Correct Answer :-**

- Biodiesel [Option ID = 20153]

**24) Petro-crop plantation refers to**

**[Question ID = 12555]**

1. Planting hydrocarbon rich plants [Option ID = 20219]
2. Planting fast growing trees [Option ID = 20218]
3. Establishing gobar gas plant [Option ID = 20217]
4. Recycling of petroleum waste [Option ID = 20220]

**Correct Answer :-**

- Planting hydrocarbon rich plants [Option ID = 20219]

**25) What is Kopi Luwak? [Question ID = 12590]**

1. A book by Neil Armstrong [Option ID = 20360]
2. Coffee beans eaten and defecated by a civet [Option ID = 20358]
3. A marine mammal [Option ID = 20357]
4. Disease caused by Wuchereria bancrofti [Option ID = 20359]

**Correct Answer :-**

- Coffee beans eaten and defecated by a civet [Option ID = 20358]

**26) What term is used for waterbodies that have a sparse nutrient supply and are relatively unproductive? [Question ID = 12574]**

1. Oligotrophic [Option ID = 20293]
2. Eutrophic [Option ID = 20295]
3. Mesotrophic [Option ID = 20296]
4. Ombrotrophic [Option ID = 20294]

**Correct Answer :-**

- Oligotrophic [Option ID = 20293]

**27) What is the final outcome of predator-prey interactions, according to the basic Lotka-Volterra model? [Question ID = 12607]**

1. Predator and prey populations coexist, each population maintaining equilibrium population sizes that never oscillate [Option ID = 20426]
2. Both predator and prey will ultimately go extinct [Option ID = 20427]
3. Both predator and prey will increase their numbers in a chaotic manner [Option ID = 20428]
4. The predator and prey will cycle in response to one another's abundance [Option ID = 20425]

**Correct Answer :-**

- The predator and prey will cycle in response to one another's abundance [Option ID = 20425]

**28) What is the name for the measure of how harmful a substance is? [Question ID = 12609]**

1. Toxicity [Option ID = 20434]
2. Hazardousness [Option ID = 20433]
3. Dose [Option ID = 20435]
4. Magnification [Option ID = 20436]

**Correct Answer :-**

- Toxicity [Option ID = 20434]

**29) What is the role of cracks and crevices in the skin of African bush elephants? [Question ID = 12612]**

1. Helps regulate body temperature [Option ID = 20446]
2. Helps in achieving a huge appearance [Option ID = 20447]
3. Helps in fat storage [Option ID = 20448]
4. Helps prevent infection [Option ID = 20445]

**Correct Answer :-**

- Helps regulate body temperature [Option ID = 20446]

**30) Asafoetida or "heeng" is a commonly used condiment in Indian cuisine. Scientifically known as *Ferula assafoetida*, the condiment is extracted from which part of the plant? [Question ID = 12580]**

1. Root exude [Option ID = 20318]
2. Dried seeds [Option ID = 20319]
3. Dried fruits [Option ID = 20317]
4. Stem exude [Option ID = 20320]

**Correct Answer :-**

- Root exude [Option ID = 20318]

**31) Which among the following awards has been recently instituted by the Government of India for individuals or communities from rural areas that have shown extraordinary courage and dedication in protecting wildlife? [Question ID = 12585]**

1. Amrita Devi Bishnoi Award [Option ID = 20339]
2. Pitambar Pant National Award [Option ID = 20340]
3. Indira Gandhi Paryavaran Puraskar [Option ID = 20337]

4. Medini Puruskar Yojana [Option ID = 20338]

**Correct Answer :-**

- Amrita Devi Bishnoi Award [Option ID = 20339]

**32) Which energy source is cheaper and cleaner than any other energy source? [Question ID = 12608]**

1. Biomass [Option ID = 20432]
2. Solar power [Option ID = 20431]
3. Wind power [Option ID = 20429]
4. Hydroelectric power [Option ID = 20430]

**Correct Answer :-**

**33) A computer program that overlays digital maps or images of some part of the surface of the Earth to reveal and create further information is known as [Question ID = 12604]**

1. Global information system [Option ID = 20413]
2. General information system [Option ID = 20415]
3. Geographical information system [Option ID = 20414]
4. Geographical information satellite [Option ID = 20416]

**Correct Answer :-**

- Geographical information system [Option ID = 20414]

**34) Tail flukes of dugong and whales are an example of [Question ID = 12615]**

1. Parallel evolution [Option ID = 20458]
2. Adaptive radiation [Option ID = 20459]
3. Convergent evolution [Option ID = 20457]
4. Divergent evolution [Option ID = 20460]

**Correct Answer :-**

- Convergent evolution [Option ID = 20457]

**35) A man with blood group A+ has a father and mother with blood group O+ and A+, respectively. If this man marries a woman with blood group B+, whose parent's blood group is B+ and O+, then what is the probability that their second child has AB+ as its blood group? [Question ID = 12610]**

1. 100% [Option ID = 20440]
2. 25% [Option ID = 20438]
3. 0% [Option ID = 20437]
4. 75% [Option ID = 20439]

**Correct Answer :-**

- 25% [Option ID = 20438]

**36) F2 ratio of 13:3 in a certain non-Mendelian inheritance is due to**

**[Question ID = 12547]**

1. Epistatic genes [Option ID = 20185]
2. Lethal genes [Option ID = 20188]
3. Complementary genes [Option ID = 20186]
4. Linked genes [Option ID = 20187]

**Correct Answer :-**

- Epistatic genes [Option ID = 20185]

**37) The Humanoid robot Sophia, developed by Hong Kong based Hanson Robotics, was granted citizenship by which country? [Question ID = 12618]**

1. Saudi Arabia [Option ID = 20472]

2. Canada [Option ID = 20471]
3. Singapore [Option ID = 20469]
4. United Arab Emirates [Option ID = 20470]

**Correct Answer :-**

- Saudi Arabia [Option ID = 20472]

**38) Spiders specialize in scavenging prey from the webs of other spiders. This an example of [Question ID = 12577]**

1. Coevolution [Option ID = 20307]
2. Kleptoparasites [Option ID = 20306]
3. Brood parasites [Option ID = 20305]
4. Direct competition between rivals [Option ID = 20308]

**Correct Answer :-**

- Kleptoparasites [Option ID = 20306]

**39) Although feathers appeared in the flightless ancestor of birds, only later were they used for flight in birds. So, feathers are a classical example of \_\_\_\_\_ [Question ID = 12597]**

1. Exaptation [Option ID = 20386]
2. Adaptation [Option ID = 20385]
3. Orogeny [Option ID = 20388]
4. Vicariance [Option ID = 20387]

**Correct Answer :-**

- Exaptation [Option ID = 20386]

**40) *Nitrobacter* oxidizes**

**[Question ID = 12545]**

1. Nitrate to nitrite [Option ID = 20178]
2. Nitrite to nitrate [Option ID = 20180]
3. Ammonia to nitrate [Option ID = 20177]
4. Ammonia to nitrogen [Option ID = 20179]

**Correct Answer :-**

- Nitrite to nitrate [Option ID = 20180]

**41) Ear ossicles in mammals are part of [Question ID = 12621]**

1. None of these [Option ID = 20484]
2. Dermatocranium [Option ID = 20481]
3. Endocranium [Option ID = 20483]
4. Splanchnocranium [Option ID = 20482]

**Correct Answer :-**

- Splanchnocranium [Option ID = 20482]

**42) Caecilians belong to which group of animals? [Question ID = 12616]**

1. Mammals [Option ID = 20463]
2. Amphibians [Option ID = 20462]
3. Arthropods [Option ID = 20464]
4. Reptiles [Option ID = 20461]

**Correct Answer :-**

- Amphibians [Option ID = 20462]

**43) Alpha diversity in areas of ecotones [Question ID = 12595]**



1. None of these [Option ID = 20380]
2. Remains Neutral [Option ID = 20379]
3. Increases [Option ID = 20377]
4. Decreases [Option ID = 20378]

**Correct Answer :-**

- Increases [Option ID = 20377]

**44) RNA editing primarily**

**[Question ID = 12542]**

1. Increases rate of transcription of rRNA gene [Option ID = 20166]
2. Increases stability of RNA [Option ID = 20168]
3. Causes degradation of excessively transcribed RNA [Option ID = 20165]
4. Can change the meaning of the RNA message [Option ID = 20167]

**Correct Answer :-**

- Can change the meaning of the RNA message [Option ID = 20167]

**45) The fossil record shows that 99% of all species that have ever existed are now extinct. Given this, why should we be concerned about the current rate of extinction? [Question ID = 12578]**

1. It is very rapid and caused largely by human activity [Option ID = 20309]
2. Since only a small fraction of species have been described we don't know what valuable species have been lost [Option ID = 20311]
3. All of these [Option ID = 20312]
4. Endemic species hotspots are particularly threatened [Option ID = 20310]

**Correct Answer :-**

- All of these [Option ID = 20312]

**46) The famous hominin fossil Lucy belongs to [Question ID = 12611]**

1. *Ardipithecus ramidus* [Option ID = 20443]
2. *Australopithecus africanus* [Option ID = 20441]
3. *Homo habilis* [Option ID = 20444]
4. *Australopithecus afarensis* [Option ID = 20442]

**Correct Answer :-**

- *Australopithecus afarensis* [Option ID = 20442]

**47) What term is used for relatively simple measurements that are intended to represent complex aspects of environmental quality? [Question ID = 12606]**

1. Environmental indicator [Option ID = 20424]
2. Monitoring indicators [Option ID = 20422]
3. Quality control values [Option ID = 20421]
4. Environmental quality values [Option ID = 20423]

**Correct Answer :-**

- Environmental indicator [Option ID = 20424]

**48) From which of the following parts of the plant is the saffron spice extracted? [Question ID = 12569]**

1. Sepal [Option ID = 20275]
2. Stigma [Option ID = 20276]
3. Leaf [Option ID = 20273]
4. Petal [Option ID = 20274]

**Correct Answer :-**

- Stigma [Option ID = 20276]

**49) Under the Environmental Protection Act, 1986, E-Waste (Management and Handling) Rules were enacted in which of the following year? [Question ID = 12588]**

1. 1988 [Option ID = 20349]
2. 1972 [Option ID = 20351]
3. 1999 [Option ID = 20352]
4. 2011 [Option ID = 20350]

**Correct Answer :-**

**50) Mycorrhizae represent**

**[Question ID = 12546]**

1. A parasitic association of fungi with roots of higher plants [Option ID = 20181]
2. A symbiotic association between fungi and roots of higher plants [Option ID = 20184]
3. A symbiotic association between cyanobacteria and higher plants [Option ID = 20182]
4. A symbiotic association between cyanobacteria and fungi [Option ID = 20183]

**Correct Answer :-**

- A symbiotic association between fungi and roots of higher plants [Option ID = 20184]

**51) Five basic segments of the tetrapod limb in a proximal to distal sequence are [Question ID = 12620]**

1. Metapodium, Mesopodium, Epipodium, Propodium, Phalanges [Option ID = 20477]
2. Propodium, Epipodium, Mesopodium, Metapodium, Phalanges [Option ID = 20478]
3. Propodium, Mesopodium, Metapodium, Epipodium, Phalanges [Option ID = 20480]
4. Phalanges, Mesopodium, Epipodium, Metapodium, Propodium [Option ID = 20479]

**Correct Answer :-**

- Propodium, Epipodium, Mesopodium, Metapodium, Phalanges [Option ID = 20478]

**52) Epiphytes are most abundant in**

**[Question ID = 12553]**

1. Savannahs [Option ID = 20211]
2. Grasslands [Option ID = 20210]
3. Tropical rain forests [Option ID = 20212]
4. Temperate deciduous forests [Option ID = 20209]

**Correct Answer :-**

- Tropical rain forests [Option ID = 20212]

**53) Three species of field crickets, *Acheta domesticus*, *Gryllus bimaculatus*, and *Grllodes sigillatus*, all mate in the same agricultural field, but they pair off correctly because they have different calls. This is a specific example of a \_\_\_\_\_ barrier, called \_\_\_\_\_. [Question ID = 12602]**

1. prezygotic ... behavioral isolation [Option ID = 20407]
2. prezygotic ... temporal isolation [Option ID = 20406]
3. prezygotic ... gametic isolation [Option ID = 20405]
4. postzygotic ... mechanical isolation [Option ID = 20408]

**Correct Answer :-**

- prezygotic ... behavioral isolation [Option ID = 20407]

**54) Modifications or characteristics acquired by a parental organism due to actions performed during its lifetime are passed on to the offspring. This idea represents [Question ID = 12619]**

1. Soft inheritance [Option ID = 20474]
2. Natural selection [Option ID = 20475]
3. Neo-Darwinism [Option ID = 20476]
4. Hard inheritance [Option ID = 20473]

**Correct Answer :-**

- Soft inheritance [Option ID = 20474]

**55) Species with both altruism and castes reflect an especially high level of social development. What term is used to refer to these species? [Question ID = 12573]**

1. Asocial [Option ID = 20290]
2. Social [Option ID = 20289]
3. Societal [Option ID = 20292]
4. Eusocial [Option ID = 20291]

**Correct Answer :-**

- Eusocial [Option ID = 20291]

**56) International Solar Alliance (ISA) is a group of how many solar resource rich countries? [Question ID = 12526]**

1. ~100 [Option ID = 20101]
2. ~122 [Option ID = 20103]
3. ~152 [Option ID = 20104]
4. ~200 [Option ID = 20102]

**Correct Answer :-**

- ~122 [Option ID = 20103]

**57) Sex change in some animals from female to male is called as [Question ID = 12598]**

1. Protandry [Option ID = 20389]
2. Hermaphroditism [Option ID = 20392]
3. Polyandry [Option ID = 20391]
4. Protogyny [Option ID = 20390]

**Correct Answer :-**

- Protogyny [Option ID = 20390]

**58) Mammary glands are modified [Question ID = 12614]**

1. None of these [Option ID = 20456]
2. Sweat glands [Option ID = 20455]
3. Sebaceous glands [Option ID = 20454]
4. Mucus glands [Option ID = 20453]

**Correct Answer :-**

- Sweat glands [Option ID = 20455]

**59) Air pollutant gases causing acid rain are**

**[Question ID = 12561]**

1. CO<sub>2</sub> & O<sub>3</sub> [Option ID = 20242]
2. CO<sub>2</sub> & Cl<sub>2</sub> [Option ID = 20241]
3. SO<sub>x</sub> & NO<sub>x</sub> [Option ID = 20243]
4. CFC & CO<sub>2</sub> [Option ID = 20244]

**Correct Answer :-**

- SO<sub>x</sub> & NO<sub>x</sub> [Option ID = 20243]

**60) The Great American Interchange in Late Cenozoic happened through the [Question ID = 12566]**

1. Isthmus of Panama [Option ID = 20261]
2. Northwestern Passages [Option ID = 20263]
3. Labrador Sea [Option ID = 20262]

4. Bering Strait [Option ID = 20264]

**Correct Answer :-**

- Isthmus of Panama [Option ID = 20261]

**61) Endosulphan has been banned under the Stockholm Convention because [Question ID = 12582]**

1. none of these [Option ID = 20328]
2. it is an endocrine disruptor [Option ID = 20327]
3. it depletes ozone [Option ID = 20325]
4. it causes global warming [Option ID = 20326]

**Correct Answer :-**

- it is an endocrine disruptor [Option ID = 20327]

**62) Choose the correct sequence of primary terrestrial ecological succession**

**[Question ID = 12592]**

1. Crustose Lichen> Foliose Lichen> Mosses> Grasses> Shrubs> Herbs> Trees [Option ID = 20368]
2. Crustose Lichen> Foliose Lichen> Mosses> Grasses> Herbs> Shrubs> Trees [Option ID = 20365]
3. Crustose Lichen> Foliose Lichen> Mosses> Herbs > Grasses> Shrubs > Trees [Option ID = 20367]
4. Foliose Lichen> Crustose Lichen> Grasses> Mosses> Herbs> Shrubs> Trees [Option ID = 20366]

**Correct Answer :-**

- Crustose Lichen> Foliose Lichen> Mosses> Grasses> Herbs> Shrubs> Trees [Option ID = 20365]

**63) Which is the most dominant immunoglobulin in colostrum? [Question ID = 12622]**

1. IgE [Option ID = 20488]
2. IgM [Option ID = 20485]
3. IgA [Option ID = 20487]
4. IgG [Option ID = 20486]

**Correct Answer :-**

- IgA [Option ID = 20487]

**64) Which of the following is an example of an X-linked recessive disease? [Question ID = 12613]**

1. Tay-Sachs disease [Option ID = 20451]
2. Hemophilia A [Option ID = 20449]
3. Cystic fibrosis [Option ID = 20450]
4. Sickle cell anemia [Option ID = 20452]

**Correct Answer :-**

- Hemophilia A [Option ID = 20449]

**65) Which of the following terrestrial ecosystem has the highest productivity? [Question ID = 12596]**

1. Agricultural land [Option ID = 20384]
2. Taiga [Option ID = 20382]
3. Savanna [Option ID = 20381]
4. Temperate grassland [Option ID = 20383]

**Correct Answer :-**

- Taiga [Option ID = 20382]

**66) Which of the following is the maximum level of noise that can be tolerated by human ear? [Question ID = 12560]**

1. 120 decibels [Option ID = 20240]
2. 80 decibels [Option ID = 20239]
3. 20 decibels [Option ID = 20237]

4. 100 decibels [Option ID = 20238]

**Correct Answer :-**

- 80 decibels [Option ID = 20239]

**67) Which of the following would be an appropriate example of microorganisms that obtain energy by oxidizing sulphides? [Question ID = 12576]**

1. Rhizobia [Option ID = 20301]
2. Nitrobacter [Option ID = 20303]
3. Nitrosomonas [Option ID = 20302]
4. Thiobacillus [Option ID = 20304]

**Correct Answer :-**

- Thiobacillus [Option ID = 20304]

**68) Which of the following greenhouse gases has the greatest heat trapping ability per molecule? [Question ID = 12584]**

1. Chlorofluorocarbon [Option ID = 20335]
2. Methane [Option ID = 20336]
3. Carbon dioxide [Option ID = 20333]
4. Carbon monoxide [Option ID = 20334]

**Correct Answer :-**

- Chlorofluorocarbon [Option ID = 20335]

**69) Which of the following is not a greenhouse gas? [Question ID = 12563]**

1. Nitrogen [Option ID = 20252]
2. Methane [Option ID = 20251]
3. Nitrous oxide [Option ID = 20250]
4. Carbon dioxide [Option ID = 20249]

**Correct Answer :-**

- Nitrogen [Option ID = 20252]

**70) Which one of the following has the maximum genetic diversity in India? [Question ID = 12581]**

1. Wheat [Option ID = 20324]
2. Mango [Option ID = 20323]
3. Teak [Option ID = 20322]
4. Tea [Option ID = 20321]

**Correct Answer :-**

- Mango [Option ID = 20323]

**71) Which one of the following hypothesis best explains the following statement-“Older communities have high density of population distribution compared to newly evolved ones, because more time has been available in the former for development of biota in an uninterrupted fashion” [Question ID = 12594]**

1. Age-Stability Hypothesis [Option ID = 20374]
2. Evolutionary Time Hypothesis [Option ID = 20375]
3. Temporal heterogeneity Hypothesis [Option ID = 20376]
4. Productivity Hypothesis [Option ID = 20373]

**Correct Answer :-**

- Evolutionary Time Hypothesis [Option ID = 20375]

**72) A village in Himachal Pradesh has a population of 1,100 individuals. The village has a birth rate of 12/100, a death rate of 8/100, and an emigration rate of 2/100. How many people will be added to village's population in one year? [Question ID = 12601]**

1. 20 [Option ID = 20403]
2. 6 [Option ID = 20402]
3. 2 [Option ID = 20401]
4. 22 [Option ID = 20404]

**Correct Answer :-**

- 22 [Option ID = 20404]

**73) Calico cats are an example of [Question ID = 12624]**

1. Chimerism [Option ID = 20495]
2. Mosaic expression [Option ID = 20494]
3. X - inactivation [Option ID = 20493]
4. Both [X - inactivation]&[ Mosaic expression] [Option ID = 20496]

**Correct Answer :-**

- Both [X - inactivation]&[ Mosaic expression] [Option ID = 20496]

**74) Which kind of mimicry is found in Spotted Hyenas? [Question ID = 12567]**

1. Sexual mimicry [Option ID = 20266]
2. Batesian mimicry [Option ID = 20267]
3. Mullerian mimicry [Option ID = 20265]
4. None of these [Option ID = 20268]

**Correct Answer :-**

- Sexual mimicry [Option ID = 20266]

**75) Major deserts of the world are found at latitude of approximately 25-30°. This is due to which one of the following? [Question ID = 12600]**

1. ascending warm moist air from the Hadley cell [Option ID = 20398]
2. descending cool dry air from the Ferrel cell [Option ID = 20399]
3. descending cool dry air from the Hadley cell [Option ID = 20397]
4. ascending warm moist air from the Ferrel cell [Option ID = 20400]

**Correct Answer :-**

- descending cool dry air from the Hadley cell [Option ID = 20397]

**76) Epigeal is usually referred to**

**[Question ID = 12536]**

1. Seed germination [Option ID = 20141]
2. Root parasite [Option ID = 20143]
3. Root growth [Option ID = 20142]
4. Underground rhizome [Option ID = 20144]

**Correct Answer :-**

- Seed germination [Option ID = 20141]

**77) Siderosis is a disease caused by the inhalation of dust containing**

**[Question ID = 12557]**

1. Mica [Option ID = 20228]
2. Iron [Option ID = 20225]
3. Coal [Option ID = 20226]
4. Silica [Option ID = 20227]

**Correct Answer :-**

- Iron [Option ID = 20225]

**78) Plants growing on the surface of rocks or stones are called**

**[Question ID = 12537]**

1. Episodic [Option ID = 20147]
2. Epiphyte [Option ID = 20146]
3. Epilithic [Option ID = 20145]
4. Epizoic [Option ID = 20148]

**Correct Answer :-**

- Epilithic [Option ID = 20145]

**79) Multiple mitosis without cytokinesis results in a polynuclear cell in which kind of cleavage? [Question ID = 12623]**

1. Telolecithal cleavage [Option ID = 20489]
2. Radial cleavage [Option ID = 20491]
3. Spiral cleavage [Option ID = 20492]
4. Superficial cleavage [Option ID = 20490]

**Correct Answer :-**

- Superficial cleavage [Option ID = 20490]

**80) The relationship between standard deviation and variance is explained as [Question ID = 12605]**

1. Standard deviation equals the squared variance [Option ID = 20418]
2. These two measures are unrelated [Option ID = 20419]
3. Variance is the square root of standard deviation [Option ID = 20420]
4. Standard deviation is the square root of variance [Option ID = 20417]

**Correct Answer :-**

- Standard deviation is the square root of variance [Option ID = 20417]

**81) How many major tectonic plates constitute the Earth's lithosphere? [Question ID = 12565]**

1. Seven [Option ID = 20259]
2. Eight [Option ID = 20260]
3. Five [Option ID = 20257]
4. Six [Option ID = 20258]

**Correct Answer :-**

- Seven [Option ID = 20259]

**82) Which of the following herpetologists received Padma Shri in the year 2018? [Question ID = 12589]**

1. Romulus Whitaker [Option ID = 20353]
2. R. H. Whittaker [Option ID = 20354]
3. Ashish Kothari [Option ID = 20355]
4. Sir David Attenborough [Option ID = 20356]

**Correct Answer :-**

- Romulus Whitaker [Option ID = 20353]

**83) Some of the oil pollution in oceans occurs naturally due to leaks in the ocean floor. This however, accounts for only a portion of the total oil reaching the ocean. The primary source of oceanic oil pollution is [Question ID = 12579]**

1. None of these [Option ID = 20316]
2. Inland sources such as washoff of motor vehicles [Option ID = 20315]
3. Oil spills, tanker accidents [Option ID = 20313]
4. Harbour pollution [Option ID = 20314]

**Correct Answer :-**

- Oil spills, tanker accidents [Option ID = 20313]

**84) The term that refers to the variable expression of the genotype in response to variations in environmental conditions is [Question ID = 12572]**

1. Genotypic plasticity [Option ID = 20287]
2. Evolution [Option ID = 20288]
3. Phenotypic plasticity [Option ID = 20286]
4. Natural selection [Option ID = 20285]

**Correct Answer :-**

- Phenotypic plasticity [Option ID = 20286]

**85) Which Indian state or UT initiated "Project Great Indian bustard"? [Question ID = 12564]**

1. Daman and Diu [Option ID = 20254]
2. Gujarat [Option ID = 20255]
3. Maharashtra [Option ID = 20253]
4. Rajasthan [Option ID = 20256]

**Correct Answer :-**

- Rajasthan [Option ID = 20256]

**86) Which of the following is a critically endangered organism as per IUCN's Red Data Book? [Question ID = 12591]**

1. Eld's deer (*Rucervus eldii eldii*) [Option ID = 20362]
2. Tiger (*Panthera tigris*) [Option ID = 20364]
3. Asian elephant (*Elephas maximus*) [Option ID = 20363]
4. Kashmir stag (*Cervus hanglu hanglu*) [Option ID = 20361]

**Correct Answer :-**

- Kashmir stag (*Cervus hanglu hanglu*) [Option ID = 20361]

**87) Which of the following shows the correct order of soil texture from larger to smaller diameters? [Question ID = 12603]**

1. Sand, gravel, silt, and clay [Option ID = 20410]
2. Gravel, silt, sand, and clay [Option ID = 20409]
3. Gravel, sand, silt, and clay [Option ID = 20411]
4. Gravel, sand, clay, and silt [Option ID = 20412]

**Correct Answer :-**

- Gravel, sand, silt, and clay [Option ID = 20411]

**88) Which of the following is a halophyte? [Question ID = 12593]**

1. *Pinus nigra* [Option ID = 20372]
2. *Rauwolfia serpentina* [Option ID = 20370]
3. *Rhizophora sp.* [Option ID = 20369]
4. *Ficus religiosa* [Option ID = 20371]

**Correct Answer :-**

- *Rhizophora sp.* [Option ID = 20369]

**89) Which of the following combination is true for a biodiversity hotspot?**

**i. It must contain at least 1500 species of vascular plants as endemic**

**ii. It must have 30% or less of its original natural vegetation**

**iii. It must be threatened**

**iv. It must have 2000 species of trees [Question ID = 12568]**

1. i, ii, iii, iv [Option ID = 20272]
2. i, ii, iii [Option ID = 20270]



3. i, ii [Option ID = 20269]  
4. ii, iii, iv [Option ID = 20271]

**Correct Answer :-**

- i, ii, iii [Option ID = 20270]

**90) Which of the following group of organisms contains the largest number of economically important pest species? [Question ID = 12575]**

1. Plant pathogens [Option ID = 20299]
2. Nematode worms [Option ID = 20300]
3. Weeds [Option ID = 20297]
4. Insects [Option ID = 20298]

**Correct Answer :-**

- Plant pathogens [Option ID = 20299]

**91) Which among the following is a key faunal species that is being conserved and monitored in 'Dachigam National Park'? [Question ID = 12586]**

1. Golden Oriole [Option ID = 20342]
2. Yellow-throated Marten [Option ID = 20343]
3. Hangul or Kashmir Stag [Option ID = 20344]
4. Musk Deer [Option ID = 20341]

**Correct Answer :-**

- Hangul or Kashmir Stag [Option ID = 20344]

**92) Dobson unit is a measure of**

**[Question ID = 12562]**

1. CO<sub>2</sub> concentration [Option ID = 20245]
2. CFC concentration [Option ID = 20246]
3. O<sub>3</sub> concentration [Option ID = 20247]
4. CO concentration [Option ID = 20248]

**Correct Answer :-**

- O<sub>3</sub> concentration [Option ID = 20247]

**93) The CITES treaty has been helpful in protecting endangered animals and plants by [Question ID = 12583]**

1. preventing the hunting of whales and dolphins [Option ID = 20332]
2. funding projects for breeding endangered plants and animals [Option ID = 20331]
3. listing those species and products whose international trade is controlled [Option ID = 20330]
4. listing all species that can be hunted, traded, and used commercially [Option ID = 20329]

**Correct Answer :-**

- listing those species and products whose international trade is controlled [Option ID = 20330]

**94) Total range of environmental conditions that are suitable for existence of a species without any competition and predation from other species is its [Question ID = 12571]**

1. Success niche [Option ID = 20281]
2. Hyper niche [Option ID = 20284]
3. Fundamental niche [Option ID = 20282]
4. Realized niche [Option ID = 20283]

**Correct Answer :-**

- Fundamental niche [Option ID = 20282]

**95)**

**Which 'Agro-Ecosystem' is characterized by low, erratic rainfall with high coefficient of variation and frequent droughts in India? [Question ID = 12587]**

1. Arid agro-ecosystem [Option ID = 20346]
2. Hill and Mountain agro-ecosystem [Option ID = 20348]
3. Irrigated agro-ecosystem [Option ID = 20345]
4. Coastal agro-ecosystem [Option ID = 20347]

**Correct Answer :-**

- Arid agro-ecosystem [Option ID = 20346]

**96) The photochemical smog is produced by**

**[Question ID = 12556]**

1. Nitrogen oxides [Option ID = 20221]
2. Nitrogen oxides & hydrocarbons [Option ID = 20223]
3. Solar radiation on NO<sub>x</sub> & hydrocarbon [Option ID = 20224]
4. Hydrocarbons [Option ID = 20222]

**Correct Answer :-**

- Solar radiation on NO<sub>x</sub> & hydrocarbon [Option ID = 20224]

**97) The number of types of gametes that can be produced by a plant with genotype AABBCC is**

**[Question ID = 12549]**

1. One [Option ID = 20193]
2. Three [Option ID = 20195]
3. Two [Option ID = 20194]
4. Four [Option ID = 20196]

**Correct Answer :-**

- One [Option ID = 20193]

**98) Stratospheric ozone is produced by electromagnetic radiations of wavelength in the range of**

**[Question ID = 12552]**

1. 280 – 320 nm [Option ID = 20207]
2. 150 – 180 nm [Option ID = 20206]
3. 120 – 200 nm [Option ID = 20205]
4. 50 – 100 nm [Option ID = 20208]

**Correct Answer :-**

- 280 – 320 nm [Option ID = 20207]

**99) In India, an active volcano exists in [Question ID = 12599]**

1. Car Nicobar [Option ID = 20393]
2. Mayabunder [Option ID = 20395]
3. Nancowry [Option ID = 20394]
4. Barren [Option ID = 20396]

**Correct Answer :-**

- Barren [Option ID = 20396]

**100) One of the major impacts of habitat fragmentation recognized at the global level is [Question ID = 12540]**

1. Ecosystem diversity [Option ID = 20157]
2. Biodiversity richness [Option ID = 20160]
3. Pollution [Option ID = 20159]

4. Biodiversity crisis [Option ID = 20158]

**Correct Answer :-**

- Biodiversity crisis [Option ID = 20158]