

1. Acid rain is caused by an increase in the atmospheric concentration of:
 - a. Ozone and dust
 - b. SO_2 and NO_2
 - c. SO_3 and CO
 - d. CO_2 and CO
2. As it travels through the food chain the concentration of DDT:
 - a. Increases
 - b. Remains constant
 - c. Decreases
 - d. Fluctuates randomly
3. Which radical from chlorofluorocarbon gets released in the atmosphere and causes ozone depletion
 - a. Flourine
 - b. Chlorine
 - c. Carbon
 - d. Both (a) and (b)
4. The word Ecology was first used by:
 - a. Charles Elton
 - b. Ernst Haeckel
 - c. A.G. Tansley
 - d. F.E. Clements
5. Which of the following is not a factor influencing intra-specific relationship :
 - a. Reproduction
 - b. Competition for food
 - c. Social life and communal relationship
 - d. Antagonism
6. Any feature of an organism or its part which enable it to exist under conditions of its habitat is known as:
 - a. Adaptive variation
 - b. Adjustment
 - c. Acclimatization
 - d. Adaptation
7. Parasitism and predation both are inter-specific relationships, but they differ from each other in:
 - a. The involvement of two different species
 - b. One species is always benefitted
 - c. One species is always inhibited
 - d. The host is not directly killed in one of them
8. The following is the correct grazing food chain
 - a. Grass – grasshopper – Frog – Snake – hawk
 - b. Grass – Frog – Grasshopper – snake – Hawk
 - c. Grass – Grasshopper – Frog – hawk – snake
 - d. Grass – grasshopper – snake – Frog – hawk
9. In any ecosystem, the number of individuals in a species remains more or less constant over a period of time. This constancy of numbers is maintained by:
 - a. Parasites
 - b. Predators
 - c. Man
 - d. Available food
10. At present the most significant cause of dwindling biodiversity is:
 - a. Habitat destruction
 - b. Global Warming
 - c. Biological Magnification
 - d. Ozone depletion
11. When in a population, the birth and death rates exactly balance each other, it is called:
 - a. Exponential growth phase
 - b. Initial Growth Phase
 - c. Acceleration phase
 - d. Plateau phase
12. Significant wetlands of India have been declared as:
 - a. Simpson's sites
 - b. Naperian sites
 - c. Ramsar Sites
 - d. Shannon sites
13. A species growing well in a limited zone only is known as:
 - a. Endangered
 - b. Extinct
 - c. Endemic
 - d. Sporadic
14. When was Project Tiger launched:
 - a. 1973
 - b. 1974
 - c. 1975
 - d. 1976
15. Which of the following agency published the Red Data Book:
 - a. IUCN
 - b. NEERI
 - c. NWAP
 - d. CITES
16. Which layer of atmosphere is also known as Ozonosphere:
 - a. Troposphere
 - b. Stratosphere
 - c. Mesosphere
 - d. Exosphere
17. Which of the following is not a criteria air pollutant:
 - a. Particulates
 - b. Nitrogen Oxides
 - c. Hydrogen Sulphide
 - d. Sulphur dioxide
18. The noise threshold limit value (TLV) is:
 - a. 90dB for 8 hrs
 - b. 95dB for 4 hrs
 - c. 100dB for 2 hrs
 - d. All are correct

19. A fertile soil is likely to have a pH value of:
 - a. 3-4
 - b. 8-9
 - c. 6-7
 - d. 10-11
20. In India, the temperature evergreen vegetation is found in:
 - a. Western Himalaya above 3500m
 - b. Eastern and Western Himalayas less than 3500m
 - c. Rajasthan and Punjab
 - d. Eastern Ghats and Assam
21. Cultivation in drought conditions causes
 - a. Permanent soil erosion
 - b. Deforestation
 - c. Infiltration
 - d. Salination
22. Which gas produced in open dumps from decomposition of biodegradable waste:
 - a. Ethane
 - b. Methane
 - c. Propane
 - d. Ethene
23. *Jatropha* gained popularity in the last decade as a
 - a. Biogas plant
 - b. Biopetrol plant
 - c. Biofertilizer plant
 - d. Biodiesel plant
24. Which of the following nutrient replenish the soil after growing leguminous plants:
 - a. Nitrogen
 - b. Oxygen
 - c. Phosphorus
 - d. Potassium
25. Which type of farming involves ploughing, seeding, cultivating and harvesting at right angles to the direction of the slope, rather than down it:
 - a. Strip Farming
 - b. Terracing
 - c. Contour farming
 - d. Conservation tillage
26. The long term problem/s associated with use of chemical pesticides is/are:
 - a. Non-target toxicity
 - b. Secondary pest outbreaks
 - c. Increased resistance of pests
 - d. All of these
27. Which of the following statements is not true about Green Revolution:
 - a. In the 1960's the World Trade Organisation began a massive program to increase world food production
 - b. The immediate short term gains of Green revolution were impressive
 - c. The Green revolution techniques were on the whole based on unsustainable agricultural practices
 - d. Both (b) and (C)
28. *Bacillus polymyxa* is a:
 - a. Free living, non-symbiotic nitrogen fixing bacteria
 - b. Green manure
 - c. Biological insecticide
 - d. Hormonal stimulant
29. In Gene banks organisms with desirable characters are stored in the form of:
 - a. Seeds
 - b. Vegetative dormant organs
 - c. Frozen eggs or sperms
 - d. All of these
30. With the application of $(\text{NH}_4)_2\text{SO}_4$ as a fertilizer, ammonium ions are selectively absorbed while sulphate ions are left behind, which make the soil:
 - a. Acidic
 - b. Alkaline
 - c. Neutral
 - d. None of these
31. In which air pollution control equipment, particulate matter is removed by first being charged by electrons jumping from one high voltage to another and then migrating to the positively charged electrode:
 - a. Settling Chambers
 - b. Electro-static precipitators
 - c. Cyclones
 - d. Wet collectors
32. The protocol on substances that deplete the ozone layer is known as the:
 - a. Kyoto
 - b. Montreal
 - c. UNFCCC
 - d. CBD
33. On 22nd December 2016, which country launched a global CO_2 monitoring satellite called TanSat:
 - a. France
 - b. China
 - c. Iran
 - d. India

34. Which of the following statements is true for k-strategist populations:
 - a. Maximize their probability of surviving to reproduce in future at the expense of current reproduction
 - b. Allocate most of their resources to reproduction with little energy for growth and reproduction
 - c. Are opportunists and reproduce rapidly under favourable conditions
 - d. Both (b) and (c)
35. The formula for exponential growth curve is:
 - a. $dN/dt=rN$ b. $dt/dN=rN$
 - c. $dN/rN=dt$ d. $rN/dN=dt$
36. Obtaining the forest products by afforestation in open land, reserve areas, on the sides of railway tracts and along the road sides is called:
 - a. Complex forestry b. Agroforestry
 - c. Social forestry d. Mixed forestry
37. In a system where the energy fixed by the organisms is balanced by the energy lost during metabolic activities, the P/R ratio will be:
 - a. >1 b. <1
 - c. $=1$ d. $=0$
38. Fisherman obtain their livelihood from the ocean and need a supply of fish so that they can continue to earn a living. Which category of environmental values does it pertain to:
 - a. Utilitarian b. Ecological
 - c. Aesthetic d. Moral
39. Which of the following is a two dimensional method of EIA giving intensity as well as magnitude of the likely impacts:
 - a. Adhoc b. Checklist
 - c. Matrices d. Delphi
40. The ox-drawn plough which is more advanced than traditional hoe, but comparatively less complex than a tractor is a/an:
 - a. Low-tech technology
 - b. Hi-tech technology
 - c. Intermediate technology
 - d. Appropriate technology
41. A solar cell is made up of:
 - a. Silicon b. Titanium
 - c. Magnesium d. Teflon
42. Which of the following is a communicable disease:
 - a. Diabetes b. Diptheria
 - c. Hypertension d. Kwashiorkor
43. Which of the following nutrient cycles lacks an atmospheric component:
 - a. Phosphorus b. Carbon
 - c. Oxygen d. Sulphur
44. Which of the following air pollution control device has maximum efficiency:
 - a. Electrostatic precipitator
 - b. Dynamic precipitator
 - c. Spray tower
 - d. Wet cyclonic scrubber
45. At what stage are non-biodegradable organic materials, heavy metals and minerals removed during sewage treatment process:
 - a. Primary b. Secondary
 - c. Tertiary d. Both (a) and (b)
46. The Air (Prevention and Control of pollution) Act of 1981 was enacted by the parliament under which article of the constitution:
 - a. 253 b. 252
 - c. 252 (1) d. None of these
47. In which year did UN create the United Nations Environment Programme (UNEP):
 - a. 1983 b. 1972
 - c. 1994 d. 2001
48. When is the World Ozone Day celebrated:
 - a. 5th June b. 21st March
 - c. 16th September d. 8th October
49. Lotic system is associated with:
 - a. Rivers and Streams
 - b. Lakes and Ponds
 - c. Oceans d. Glaciers
50. Who wrote the famous book 'Silent Spring' highlighting the dangers of pesticide pollution:
 - a. M.K. Hill b. Rachael Carson
 - c. D.L. Devis d. J.M. Melius