

## ECOLOGY

1. The rate of capture of solar energy is called  
(a) NPP (b) GPP  
(d) RP (d) GPP-NPP
2. Given one is the example of harsh habitat  
(a) deep ocean trenches  
(b) tropical rain forest  
(c) tropical oceans  
(d) tropical deciduous forest
3. The organisms which can tolerate wide range of temperatures are called  
(a) stenothermals (b) eurythermals  
(d) hypothermals (d) hyperthermals
4. The diurnal habit of some animals is controlled by the factor  
(a) water (b) soil  
(d) light (d) pH
5. Which of the following is the characteristic of soil composition?  
(1) grain size  
(2) water holding capacity  
(3) composition  
(4) all of the above
6. The organisms called conformers can  
(a) maintain constant internal environment  
(b) change their internal environment  
(c) change their external environment  
(d) both (b) & (d)
7. Under normal conditions, the population density is controlled by  
(a) death only  
(b) birth only  
(c) both birth & deaths  
(d) immigration & emigration
8. When the habitats are unlimited, the population show  
(a) exponential growth  
(b) logistic growth  
(d) S-shaped growth  
(d)  $\frac{dN}{dt} = rN \left( \frac{K-N}{K} \right)$
9. According to Allen's rule  
(a) cold climate mammals have short height  
(b) cold climate mammals have short ear & limbs  
(c) cold climate fishes have short length  
(d) cold climate fishes have short fins & vertebrae
10. If 4 individuals died in laboratory out of 40 fruit flies in a week. Then the death rate of the population is  
(a) 10 (b) 0.01  
(d) 20 (d) 0.1
11. The age pyramid of declining population is  
(a) expanding (b) stable  
(d) bell shaped (d) urn shaped
12. The given one growth model is considered more real  
(a) logistic curve  
(b) exponential curve  
(d) J-shaped  
(d) K
13. What are the functions of predators?  
(a) maintaining diversity  
(b) reducing competition  
(c) both (a) & (b)  
(d) none of the above
14. An epiphyte growing on mango plant is an example of  
(a) mutualism (b) commensalism  
(d) parasitism (d) amensalism
15. The vertical distribution of species occupying different levels is called

- (a) trophic energy (b) energy flow  
(d) nutrient cycling (d) stratification
- 16.** The rate of biomass production is called  
(a) GPP  
(b) NPP  
(c) productivity  
(d) secondary productivity
- 17.** The enzymatic degradation of detritus into simpler inorganic substances is called  
(a) leaching (b) fragmentation  
(c) catabolism (d) both (a) & (b)
- 18.** The humus  
(a) is slightly alkaline  
(b) is rich in carbohydrate  
(c) undergoes fast decomposition  
(d) is resistant to decomposition
- 19.** The plant absorb only \_\_\_\_\_ of light of PAR  
(a) 2-10 % (b) 10-15 %  
(c) 15-20 % (d) 40-50 %
- 20.** The energy flow in any food chain is  
(a) always unidirectional  
(b) always bidirectional  
(c) always multidirectional  
(d) sometimes bidirectional
- 21.** The maximum amount of energy available in any food chain is in  
(a) top carnivores (b) herbivores  
(c) producers (d) decomposers
- 22.** The bigger is the food chain  
(a) energy is utilized  
(b) less food required  
(c) more are the top carnivores  
(d) lesser energy is available to top carnivores
- 23.** The pyramid of energy is  
(a) always inverted  
(b) always upright  
(c) spindle shaped  
(d) urn shaped
- 24.** The pioneer species during ecological succession show  
(a) fast growth  
(b) very slow growth  
(c) climate vegetation  
(d) climax community
- 25.** The reservoir for gaseous type of nutrient cycle is  
(a) atmosphere (b) earth crust  
(c) oceans (d) rocks
- 26.** The variety of species and their relative abundance present within the region is  
(a) genetic diversity  
(b) species diversity  
(c) ecological diversity  
(d) relative abundance
- 27.** Which of the following are incorrect w.r.t. major trends during succession?  
(a) Increase in standing crop  
(b) Decrease in net community production  
(c) Niche become generalized  
(d) Increase in diversity
- 28.** According to WCU threatened species are  
(a) critically endangered species  
(b) endangered species  
(c) vulnerable species  
(d) all of the these
- 29.** Catalogue of species and subspecies facing various degree of extinction risk is  
(a) red list (b) blue list  
(c) green list (d) yellow list
- 30.** Which of the following is a sacred plant?  
(a) Ocimum sanctum  
(b) Aloe vera  
(c) Murraya Koenigii

- (d) Cupressus
31. What is B.O.D.
- (a) Amount of O<sub>2</sub> utilized by organisms in water
- (b) Total amount of O<sub>2</sub> present in water
- (c) Amount of O<sub>2</sub> utilized by micro-organisms for decomposition
- (d) All of above
32. Ozone hole is caused by:
- (a) Acetylene (b) Ethylene
- (c) CFCs (d) Methane
33. A gas that contributes most to green house effect is:
- (a) CH<sub>4</sub> (b) NO<sub>2</sub>
- (c) CO<sub>2</sub> (d) CO
34. Green - house effect is due to
- (a) Higher CO<sub>2</sub> concentration
- (b) Absorption of infra-red gases and dust particles
- (c) Both (a) and (b)
- (d) Rarification of atmosphere
35. Which one of the following is not biodegradable?
- (a) Radioactive substances
- (b) Bagasse
- (c) Molasses
- (d) Agricultural wastes
36. Gas leaked in Bhopal tragedy was:
- (a) Potassium isocyanide
- (b) Sodium isocyanate
- (c) Ethyl isothiocyanate
- (d) Methyl isocyanate
37. DDT has been a major pollutant because:
- (a) Kills aquatic animals
- (b) Kills pests
- (c) Destroys many valuable species
- (d) Is non-biodegradable
38. Affinity of CO for haemoglobin as compared to oxygen is:
- (a) Two times (b) Twenty times
- (c) 100 times (d) 200 times
39. 5<sup>th</sup> June is:
- (a) World Forest Day
- (b) World Red Cross Day
- (c) World Environment Day
- (d) World Food Day
40. Biological magnification occurs in case of:
- (a) Organochloride insecticides
- (b) Organophosphate pesticides
- (c) Plants and animals in ecosystem with abundant resources
- (d) Photography
41. Nutrient enrichment of water bodies causes:
- (a) Stratification (b) Eutrophication
- (c) Succession (d) None of these
42. Fluoride pollution mainly affects:
- (a) Teeth (b) Kidney
- (c) Brain (d) Heart
43. Ozone hole causes:
- (a) Global warming
- (b) Reduction in rate of photosynthesis
- (c) More ultraviolet rays come to earth
- (d) All of above
44. Chlorofluorocarbons are responsible for:
- (a) Acid rain
- (b) Ozone layer depletion
- (c) Global warming
- (d) Thermal inversion
45. A lake with an inflow of domestic sewage rich in organic waste, may result in:
- (a) Death of fish due to lack of oxygen
- (b) Death of lake very soon due to algal bloom

- (c) Increased production of fish due to lot of nutrients
- (d) Increased population of aquatic web organisms

46. Biomagnification refers to:

- (a) Rapid growth due to excessive intake of nutrients
- (b) Increase in population size
- (c) Decrease in population size
- (d) Increase in concentration of non-degradable pollutants as they pass through a food chain

47. Eutrophication is found in:

- (a) Agricultural land near thermal plant
- (b) Saline soil
- (c) Lake
- (d) Mountain

48. Blue baby syndrome results from:

- (a) Excess of TDS
- (b) Excess of chlorides
- (c) Excess of DO
- (d) Methaemoglobin

49. Ozone is a pollutant gas in:

- (a) Tropopause
- (b) Lower stratosphere
- (c) Troposphere
- (d) Mesosphere

50. Which one of the following pairs of gases are the major cause of "Greenhouse effect"?

- (a) CO<sub>2</sub> and O<sub>3</sub>
- (b) CO<sub>2</sub> and CO
- (c) CFCs and SO<sub>2</sub>
- (d) CO<sub>2</sub> and N<sub>2</sub>O

**ANSWERS KEY**

1	B	11	D	21	C	31	C	41	B
2	A	12	A	22	D	32	C	42	A
3	B	13	C	23	B	33	C	43	C
4	C	14	B	24	B	34	C	44	B
5	D	15	D	25	A	35	A	45	A
6	B	16	C	26	B	36	D	46	D
7	C	17	C	27	C	37	D	47	C
8	A	18	D	28	D	38	D	48	D
9	B	19	A	29	A	39	C	49	C
10	D	20	A	30	A	40	A	50	D