


## EXERCISE

1. Increase of population under optimum condition is termed.
  - (1) Reproductive ability
  - (2) Secondary production
  - (3) Biotic potential
  - (4) Biomass
2. What is true for individuals of same species :-
  - (1) Live in same niche
  - (2) Live in same habitat
  - (3) Interbreeding
  - (4) Live in different habitat
3. The community which starts succession at a place is termed
  - (1) Climax community
  - (2) Seral community
  - (3) Pioneer community
  - (4) Primary community
4. Earliest settlers on barren lands or the farmers of nature are
  - (1) Diatoms
  - (2) Lichens
  - (3) Moss & grasses
  - (4) Ferns
5. In plant succession last community is called :
  - (1) Ecotone
  - (2) Climax community
  - (3) Seral community
  - (4) Ecosystem
6. Group of two or more than two plant species is called as :-
  - (1) Plant community
  - (2) Animal ecosystem
  - (3) Plant ecosystem
  - (4) Ecological niche
7. Stable plant community formed during succession is called -
  - (1) Sere community
  - (2) Climax community
  - (3) Dominant community
  - (4) Ecotone
8. Succession in a water body leads to formation of -
  - (1) Mesophytic vegetation
  - (2) Xerophytic vegetation
  - (3) Halophytic vegetation
  - (4) Epiphytic vegetation
9. Competition for food, light and space is most severe in -
  - (1) Closely related species growing in the same area (in the same niche)
  - (2) Closely related species growing in different habitat
  - (3) Distantly related species growing in the same habitat
  - (4) Distantly related species growing in different habitat
10. Most successful parasites are those which do not
  - (1) Grow free
  - (2) Kill their host
  - (3) Reproduce sexually
  - (4) Survive in soil
11. The basic unit of ecological study is :-
  - (1) species
  - (2) organism
  - (3) community
  - (4) biosphere
12. Mycorrhizae relationship between fungi and roots of higher plants is ?
  - (1) Parasitic relationship
  - (2) Saprophytic relationship
  - (3) Symbiotic relationship
  - (4) Epiphytic relationship
13. Parasites adversely affect :-
  - (1) Survival of host.
  - (2) Growth of host.
  - (3) Reproduction potential of host.
  - (4) All of the above
14. The given diagram is related to which stage of succession?
 



  - (1) Pioneer community
  - (2) Reed swamp stage
  - (3) Submerged plant stage
  - (4) Submerged free floating plant stage
15. The group of organisms of different species forms a :-
  - (1) Community
  - (2) Population
  - (3) Ecosystem
  - (4) Biome
16. Which of the following is an epiphyte ?
  - (1) Orchid
  - (2) Lianas
  - (3) Santalum
  - (4) Mango
17. The correct statement for parasites is/are :-
  - (a) Host specific parasites & hosts tend to co-evolve
  - (b) Parasites have highly developed sense organs
  - (c) Parasites may reduce population density of host
  - (d) Parasites have highly developed digestive system
  - (1) a and b
  - (2) b and c
  - (3) a and c
  - (4) a and d

- 18.** In an ecosystem :
- (1) Primary producers are more than primary consumers
  - (2) Primary consumers are larger than primary producers
  - (3) Secondary consumers are larger than primary producers
  - (4) Primary consumers are least depend on primary producers
- 19.** Ecosystem term coined by -
- (1) Odum
  - (2) Mishra
  - (3) Reiter
  - (4) Tansley
- 20.** Large ecosystems are called -
- (1) Biomes
  - (2) Ecotone
  - (3) Ecads
  - (4) Biocoenosis
- 21.** Which one is not a functional aspect of ecosytem ?
- (1) Energy flow
  - (2) Productivity
  - (3) Decomposition
  - (4) Stratification
- 22.** Vultures in an ecosystem are -
- (1) Predators
  - (2) Scavengers
  - (3) Consumers
  - (4) Top carnivores
- 23.** The maximum energy is stored at which of the following trophic level in any ecosystem -
- (1) Producers
  - (2) Herbivores
  - (3) Carnivores
  - (4) Top carnivores
- 24.** The source of energy in an ecosystem is -
- (1) Sunlight
  - (2) DNA
  - (3) ATP
  - (4) RNA
- 25.** Ecosystem may be defined as -
- (1) A localized association of several plants and animals
  - (2) Different communities of plants, animals and microbes together with thier physico-chemical environment.
  - (3) Different communities of plants microbes plus their physico-chemical environment
  - (4) None of the above
- 26.** The importance of ecosystem lies in -
- (1) Flow of energy
  - (2) Cycling of materials
  - (3) Both the above
  - (4) None of the above
- 27.** Ecosystem is -
- (1) Any functional unit that includes the whole community in a given area interacting with the abiotic factors
  - (2) A group of green plants
  - (3) A group of animals interacting with environment
  - (4) Man and pets living together
- 28.** Who proposed that ecosystem is symbol of structure & function of nature -
- (1) Gardner
  - (2) Odum
  - (3) Tansley
  - (4) Reiter
- 29.** Largest ecosystem of the world are
- (1) Forests
  - (2) Grass lands
  - (3) Great lakes
  - (4) Oceans
- 30.** Which of the following is a man made artificial ecosystem
- (1) Grassland ecosystem
  - (2) Forest ecosystem
  - (3) Ecosystem of artificial lakes & dams
  - (4) None of these
- 31.** A pond is a :-
- (1) Biome
  - (2) Natural ecosystem
  - (3) Artificial ecosystem
  - (4) Community of plants & animals
- 32.** Nepenthes (Insectivorous pitcher plant) is -
- (1) Producer
  - (2) Consumer
  - (3) Both 1 & 2
  - (4) None of these
- 33.** Which one is omnivorous -
- (1) Frog
  - (2) Lion
  - (3) Deer
  - (4) Man
- 34.** Which biotic components mainly help in recycling of minerals -
- (1) Producers
  - (2) Consumers
  - (3) Decomposers
  - (4) All the above
- 35.** Trophic levels are formed by -
- (1) Only plants
  - (2) Only carnivores
  - (3) Only animals
  - (4) Origanisms linked in food chain
- 36.** In a forest ecosystem green plants are -
- (1) Primary producers
  - (2) Consumers
  - (3) Primary consumers
  - (4) Decomposers

- 37.** In an ecosystem the function of the producers is to  
(1) Convert organic compounds into inorganic compounds  
(2) Trap solar energy and convert it into chemical energy  
(3) Utilize chemical energy  
(4) Release energy
- 38.** With regard to ecological food chain, man is a -  
(1) Consumer  
(2) Producer  
(3) Both consumer & producer  
(4) decomposer
- 39.** A plant, being eaten by a herbivore which in turn is eaten by a carnivore makes -  
(1) Food chain  
(2) Web of Food  
(3) Omnivores  
(4) Interdependence
- 40.** When peacock, eats snake which eats insects depends on green plants, the peacock is -  
(1) a primary consumer  
(2) a primary decomposer  
(3) a final decomposer of plants  
(4) the apex of the food pyramid
- 41.** If we completely remove decomposers from an ecosystem, the ecosystem functioning will be adversely affected because -  
(1) Mineral movement will be blocked  
(2) Herbivores will not receive solar energy  
(3) Energy flow will be blocked  
(4) Rate of decomposition of other components will be very high
- 42.** Bamboo plant is growing in a far forest then what will be the trophic level of it :-  
(1) First trophic level ( $T_1$ )  
(2) Second trophic level ( $T_2$ )  
(3) Third trophic level ( $T_3$ )  
(4) fourth trophic level ( $T_4$ )
- 43.** Path of energy flow in an ecosystem is :  
(1) Herbivorous → producer → carnivorous → decomposer  
(2) Herbivorous → carnivorous → producer → decomposer  
(3) Producer → carnivorous → herbivorous → decomposer  
(4) Producer → herbivorous → carnivorous → decomposer
- 44.** Pyramids of energy are -  
(1) Always upright (2) Always Inverted  
(3) Mostly upright (4) Mostly inverted
- 45.** The ecological pyramid of numbers in pond ecosystem is -  
(1) Upright (2) Inverted  
(3) May upright or Inverted  
(4) First upright then inverted
- 46.** An ecosystem resists change because it is in a state of-  
(1) Homoeostasis (2) Regular Illumination  
(3) Static Imbalance (4) Food accumulation
- 47.** What is true about any ecosystem -  
(1) It is self regulatory  
(2) It is self sustained  
(3) Top carnivores have climax trophic level position  
(4) All
- 48.** The Pyramid of numbers in grassland ecosystem will be -  
(1) Upright (2) Inverted  
(3) Irregular (4) Linear
- 49.** Which ecosystem has maximum number of producers in an unit area -  
(1) Pond (2) Grassland  
(3) Forest (4) Tundra
- 50.** The storage of energy at consumer level is known as-  
(1) Gross primary production  
(2) Secondary productivity  
(3) Net primary productivity  
(4) Net productivity
- 51.** Gross primary productivity is -  
(1) Rate at which organic molecules are formed in an autotroph  
(2) Rate at which organic molecules are used up by an autotroph  
(3) Storage of organic molecules in the body of an autotroph  
(4) Rate at which organic molecules are transferred to next higher trophic level
- 52.** Carbon cycle includes (the following is a logical sequence) -  
(1) Producer – consumer – decomposer  
(2) Decomposer – consumer – producer  
(3) Producer – decomposer – consumer  
(4) Consumer – producer – decomposer

## ENVIRONMENTAL ISSUES

- 53.** The flow of materials from non living components to living components and back to the non living components in a more or less cyclic manner is called a-
- (1) Gaseous cycle                      (2) Sedimentary cycle  
(3) Biogeochemical cycle    (4) Hydrologic cycle
- 54.** Which is best for plant growth -
- (1) Loamy soil                      (2) Silt  
(3) Sandy soil                      (4) Clay soil
- 55.** The least porous soil among the following -
- (1) Loamy soil                      (2) Clay soil  
(3) Sandy soil                      (4) Peaty soil
- 56.** The science dealing with soil is called -
- (1) Pedology                      (2) Acarology  
(3) Geology                      (4) Palaeontology
- 57.** A good soil is that which -
- (1) holds whole of the water entering into it  
(2) Allows limited amount of water into it  
(3) Allows the water to percolate slowly into it  
(4) Allows the water to pass very quickly from it
- 58.** The soil near the surface is usually darker than the soil about one meter down. This is because the top soil is
- (1) Young & wet  
(2) Richer in organic matter  
(3) Richer in Ca & Mg  
(4) Dry
- 59.** A soil is said to be fertile when
- (1) It is rich in organic matter  
(2) It has capacity to hold water  
(3) It has a capacity to hold nutrients  
(4) It holds water & all essential nutrients in a definite proportion
- 60.** What is the best pH of the soil for cultivation of plants:-
- (1) 3.4 – 5.4                      (2) 6.5 – 7.5  
(3) 4.5 – 8.5                      (4) 5.5 – 6.5
- 61.** Forests near equator region are called -
- (1) Deciduous                      (2) Tropical rain forests  
(3) Coniferous forests                      (4) Temperate forests
- 62.** Grass lands with scattered trees are called -
- (1) Pampas                      (2) Steppes  
(3) Prairies                      (4) Savanna
- 63.** Temperate evergreen forests in India found in -
- (1) Himalaya                      (2) W. Bengal  
(3) Andman                      (4) Rajasthan
- 64.** Which biome refers to arctic desert -
- (1) Tundra                      (2) Taiga  
(3) Savannah                      (4) Thar desert
- 65.** Which biome is most rich in fauna and flora -
- (1) Deciduous forests  
(2) Chaparral  
(3) Tropical rain forests  
(4) Taiga
- 66.** Autumn colouration of leaves appear only in -
- (1) Tropical regions  
(2) evergreen plants  
(3) temperate deciduous plants  
(4) deserts
- 67.** Veldts of Africa & Pampas of south America are
- (1) Rain forest biomes  
(2) Chaparral biomes  
(3) Temperate biomes  
(4) Grassland biomes
- 68.** Savannahs are :
- (1) Tropical rain forest  
(2) Desert  
(3) Grassland with scattered trees  
(4) Dense forest with close canopy
- 69.** All the living organisms and non-living factors of the earth constitute -
- (1) Biosphere                      (2) Community  
(3) Biome                      (4) Association
- 70.** The term biosphere is used for the zone of the earth where life exists -
- (1) On the lithosphere  
(2) In the hydrosphere  
(3) In the lithosphere and hydrosphere  
(4) In the lithosphere, hydrosphere and atmosphere
- 71.** A biosphere is composed of
- (1) Living organisms  
(2) Living organisms + Lithosphere  
(3) Living organisms + lithosphere + atmosphere  
(4) Living organisms + lithosphere + atmosphere + hydrosphere
- 72.** Bloom occurs in -
- (1) Oligotrophic lake                      (2) Eutrophic lake  
(3) Fast flowing river                      (4) Rain water
- 73.** Rhododendron is characteristic vegetation of -
- (1) Tropical region                      (2) Mangrove  
(3) Alpine region                      (4) Epiphytes

- 74.** Which of the following plant has become a water weed in this country -  
 (1) Typha (2) Trapa  
 (3) Cyperus (4) Eichornia
- 75.** Which is normally not an air pollutant -  
 (1) CO (2) SO<sub>2</sub>  
 (3) Hydrocarbons (4) CO<sub>2</sub>
- 76.** Acid rains are due to -  
 (1) O<sub>3</sub> (2) SO<sub>2</sub> + NO<sub>2</sub>  
 (3) CO (4) CO<sub>2</sub>
- 77.** What is found in photochemical smog -  
 (1) CO (2) NO<sub>2</sub>  
 (3) Ozone (4) 2 and 3 both
- 78.** Lichens in a habitat indicates -  
 (1) Zinc in soil  
 (2) Copper in soil  
 (3) Carbon monoxide in air  
 (4) Lack of air pollution
- 79.** Green house effect mainly due to -  
 (1) SO<sub>2</sub> (2) CO<sub>2</sub> (3) CO (4) O<sub>2</sub>
- 80.** Which pollutant exhibits biomagnification in food chain -  
 (1) DDT (2) SO<sub>2</sub> (3) CO (4) PAN
- 81.** Which will not cause any atmospheric pollution -  
 (1) Hydrogen (2) Sulphur dioxide  
 (3) Carbon dioxide (4) Carbon monoxide
- 82.** Which of the following is the main factor of water pollution -  
 (1) Smoke (2) Industrial waste  
 (3) Detergent (4) Ammonia
- 83.** Main air pollutant among the following is -  
 (1) CO (2) CO<sub>2</sub>  
 (3) N<sub>2</sub> (4) Sulphur
- 84.** Which is more important for water pollution -  
 (1) Sound (2) SO<sub>2</sub>  
 (3) Salts of arsenic (4) Sewage
- 85.** Which of the following atmospheric pollutants is not produced by the exhaust of motor vehicle in Delhi -  
 (1) SO<sub>2</sub>  
 (2) Hydrocarbon gases  
 (3) Fly ash  
 (4) CO
- 86.** Pollution can be controlled by -  
 (1) Sewage treatment  
 (2) Checking atomic blasts  
 (3) Manufacturing electrically operated vehicles  
 (4) All the above
- 87.** If water pollution continues at its present rate, it will eventually -  
 (1) Stop water cycle  
 (2) Prevent precipitation  
 (3) Make oxygen molecules unavailable to water plants.  
 (4) Make nitrate molecules unavailable to water plants.
- 88.** Recent reports of acid rains in industrial cities are due to the effect of atmospheric pollution by -  
 (1) Excessive release of NO<sub>2</sub> and SO<sub>2</sub> by burning of fossil fuels.  
 (2) Excessive release of CO<sub>2</sub> by burning of fuel like wood and charcoal, cutting of forests and increased animal population.  
 (3) Excessive release of NH<sub>3</sub> by industrial plants and coal gas.  
 (4) Excessive release of CO in atmosphere by incomplete combustion of coke, charcoal and other carbonaceous fuels in paucity of oxygen,
- 89.** Which is the greatest air pollutant these days  
 (1) Factories (2) Motor vehicles  
 (3) Domestic appliances (4) animals
- 90.** Eutrophication refers to -  
 (1) High production in an aquatic ecosystem  
 (2) Low production in an aquatic ecosystem  
 (3) Low production in a terrestrial  
 (4) Stable production in a terrestrial ecosystem
- 91.** Photochemical smog was first observed in -  
 (1) London  
 (2) Los Angeles  
 (3) Paris  
 (4) Tokyo
- 92.** Domestic waste will lead to -  
 (1) Biodegradable pollution  
 (2) Nondegradable pollution  
 (3) Thermal pollution of soil  
 (4) Air pollution
- 93.** The major source of BOD in the river Ganga is -  
 (1) Leaf litter (2) Fishes  
 (3) Human waste (4) Aquatic plants
- 94.** If a lake is contaminated with DDT, its highest concentration would be found in -  
 (1) Primary consumer  
 (2) Secondary consumer  
 (3) Tertiary consumer  
 (4) None of these

- 95.** The most harmful air pollutant produced by automobiles is -  
(1)  $\text{HNO}_2$  (2)  $\text{NO}$  (3)  $\text{SO}_2$  (4)  $\text{CO}$
- 96.** Sewage water can be purified by -  
(1) Aquatic plant (2) Micro organism  
(3) Penicillin (4) Fishes
- 97.** Major pollutant in Jet plane emission is -  
(1)  $\text{SO}_2$  (2) CFC (3)  $\text{CO}$  (4)  $\text{CCl}_4$
- 98.** It is said that Tajmahal may be destroyed due to -  
(1) Flood in Yamuna river  
(2) Air pollutants released from oil refinery of Mathura  
(3) Decomposition of marble as a result of high temperature  
(4) All the above
- 99.** Melting of the ice caps might result from -  
(1) Depletion of ozone layer  
(2) Excess CFC in atmosphere  
(3) Excess  $\text{CO}_2$  in the atmosphere  
(4) Excess water rain
- 100.** Some effects of  $\text{SO}_2$  and its transformation products on plant include -  
(1) Chlorophyll destruction  
(2) Plasmolysis  
(3) Golgi body destruction  
(4) None
- 101.** Spraying of DDT on crops produces pollution of -  
(1) Soil and water only (2) Air and soil only  
(3) Air, soil and water (4) Air and water only
- 102.** What is B.O.D. :-  
(1) The amount of  $\text{O}_2$  utilised by organisms in water  
(2) The amount of  $\text{O}_2$  utilized by micro organisms for decomposition  
(3) The total amount of  $\text{O}_2$  present in water  
(4) All of the above
- 103.** Which of the following is absent in polluted water:-  
(1) Hydrilla (2) Water hyacinth  
(3) Larva of stone fly (4) Blue green algae
- 104.** Maximum green house gas released by which country :-  
(1) India (2) France  
(3) China (4) Britain
- 105.** Ozone layer of upper atmosphere is being destroyed by :  
(1) Sulphurdioxide (2) Carbondioxide  
(3) Chlorofluorocarbon (4) Smog
- 106.** Most hazardous metal pollutant of automobile exhaust is :  
(1) Hg (2) Cd (3) Pb (4) Cu
- 107.** B.O.D. is connected with  
(1) Organic matter  
(2) Microbes  
(3) Both  
(4) None
- 108.** Phytotron is a device by which -  
(1) electrons are bombarbed  
(2) protons are liberated  
(3) plants are grown in controlled environment  
(4) Mutations are produced in plants
- 109.** Biosphere refers to  
(1) Plants of the world  
(2) Special plants  
(3) Area occupied by living beings  
(4) Plants of a particular area
- 110.** Red data book is famous for -  
(1) Extinct plants and animals  
(2) Extinct plants only  
(3) Endangered plants and animals  
(4) Extinct animals only
- 111.** Green book contains :-  
(1) The list of endangered plants  
(2) The list of extinct plants  
(3) The list of rare plants grown in botanical gardens  
(4) Flora of certain area
- 112.** The method by which endangered plant species are conserved in a botanical garden or in some controlled circumstances -  
(1) Afforestation  
(2) In situ conservation  
(3) Ex situ conservation  
(4) None of the above
- 113.** Which one of the follwing may be the reason for extinction of plant species due to human activities-  
(1) Earthquakes (2) Pollution  
(3) Diseases (4) Evolution
- 114.** The main aim of plant conservation is -  
(1) To conserve the necessary ecological activities and life supporting systems  
(2) To conserve species diversity and range of genetic meterial  
(3) Both the above  
(4) None of the above

- 115.** Which of the following species in an endangered state  
 (1) Indian bustard & rhino  
 (2) Asiatic donkey  
 (3) Black buck  
 (4) All the above
- 116.** Wild life protection act was enacted in India in  
 (1) 1947 (2) 1962  
 (3) 1972 (4) 1992

- 117.** Number of wild life is continuously decreasing. What is the main reason of this :-  
 (1) Predation  
 (2) Cutting down of forest  
 (3) Destruction of habitat  
 (4) Hunting
- 118.** One of the following is associated with the conservation of forests  
 (1) Kaziranga  
 (2) Ghana  
 (3) Silent valley  
 (4) Gir

**ANSWER KEY**

Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	3	3	3	2	2	1	2	1	1	2	2	3	4	2	1
Que.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Ans.	1	3	1	4	1	4	2	1	1	2	3	1	3	4	3
Que.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Ans.	2	3	4	3	4	1	2	1	1	4	1	1	4	1	1
Que.	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Ans.	1	4	1	1	2	1	1	3	1	2	1	3	2	4	4
Que.	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Ans.	2	4	1	1	3	3	4	3	1	4	4	2	3	4	4
Que.	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Ans.	2	4	4	2	1	1	2	1	4	3	4	3	1	2	1
Que.	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105
Ans.	2	1	3	3	4	2	2	2	3	1	3	2	3	3	3
Que.	106	107	108	109	110	111	112	113	114	115	116	117	118		
Ans.	3	3	3	3	3	3	3	2	3	4	3	3	3		