ALLEN CAREER INSTITUTE KOTA (RAJASTHAN)

path to success

PRE-MEDICAL

BOTANY

ENTHUSIAST | LEADER | ACHIEVER

EXERCISE

Organism and Environment(Ecology)

ENGLISH MEDIUM

EXERCISE-I (Conceptual Questions) Build Up Your Understanding

ORGANISM TO SOME TERMINOLOGY

1. Endemic plants -
(1) Cosmopolitan
(2) Occur in a particular area
(3) Occur at high altitudes
(4) Occur on north pole

BC0001

2. Increase of population under optimum condition is termed.
(1) Reproductive ability
(2) Secondary production
(3) Biotic potential
(4) Biomass

DG0002

3. Occurence of endemic species in South America and Australia due to :-
(1) These species has been extinct from other regions
(2) Continental separation
(3) There is no terrestrial route to these places
(4) Retrogressive evolution

BC0003

4. In a population unrestricted reproductive capacity is called as :
(1) Biotic potential
(2) Fertility
(3) Carrying capacity
(4) Birth rate

DG0004

5. 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

OP0005

6. When the two ecosystems overlap each other the area is called.
(1) Ecotone
(2) Niche
(3) Edge effect
(4) Ecotypes

OP0006

7. The community which starts succession at a place is termed
(1) Climax community
(2) Seral community
(3) Pioneer community
(4) Primary community

OP0007

8. Earliest settlers on barren lands or the farmers of nature are
(1) Diatoms
(2) Lichens
(3) Moss & grasses
(4) Ferns

OP0008

9. In plant succession last community is called :
(1) Ecotone
(2) Climax community
(3) Seral community
(4) Ecosystem

OP0009

10. Group of two or more than two plant species is called as :-
(1) Plant community
(2) Animal ecosystem
(3) Plant ecosystem
(4) Ecological niche

OP0010

11. Stable plant community formed during succession is called -
(1) Sere community
(2) Climax community
(3) Dominant community
(4) Ecotone

OP0011

12. Succession in a water body leads to formation of-
(1) Mesophytic vegetation
(2) Xerophytic vegetation
(3) Halophytic vegetation
(4) Epiphytic vegetation

OP0012

13. 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

OP0013

14. Most successful parasites are those which do not
(1) Grow free
(2) Kill their host
(3) Reproduce sexually
(4) Survive in soil

OP0014

15. The basic unit of ecological study is :-
(1) species (2) organism
(3) community (4) biosphere

OP0015

16. Mycorrhizae relationship between fungi and roots of higher plants is ?
(1) Parasitic relationship
(2) Saprophytic relationship
(3) Symbiotic relationship
(4) Epiphytic relationship

OP0016

17. Parasites adversely affect :-
(1) Survival of host.
(2) Growth of host.
(3) Reproduction potential of host.
(4) All of the above

OP0017

18. Identify the correct match :-

Column – I		Column – II	
(i)	Species diversity	(a)	Great influence on community stability
(ii)	Species dominance	(b)	Zonation according to the need of light
(iii)	Stratification	(c)	Different types of species in a community
(iv)	Keystone species	(d)	Highest no. of one type of species

(1) i–c, ii–b, iii–a, iv–d
(2) i–c, ii–d, iii–b, iv–a
(3) i–b, ii–a, iii–d, iv–c
(4) i–b, ii–d, iii–a, iv–c

OP0018

19. 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

OP0019

20. The group of organisms of different species forms a :-
(1) Community
(2) Population
(3) Ecosystem
(4) Biome

OP0020

21. Consider the following statements and select the option which includes all the correct ones only:-
(a) Succession is parallel with the changes in the physical environment.
(b) As succession proceeds, the number and types of animals and decomposers also change.
(c) Littoral zone has high diversity.
(d) Key stone species are abundantly found in a community.
(1) a, b and d
(2) b, c and d
(3) a, c and d
(4) a, b and c

OP0021

22. Which of the following is an epiphyte ?
(1) Orchid
(2) Lianas
(3) Santalum
(4) Mango

OP0022

23. 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

OP0023

ECOLOGY - ECOSYSTEM TO PRODUCTIVITY

24. 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

ES0024

25. Ecosystem term coined by -
(1) Odum (2) Mishra
(3) Reiter (4) Tansley

ES0025

26. Large ecosystems are called -
(1) Biomes (2) Ecotone
(3) Ecads (4) Biocoenosis

ES0026

27. Which one is not a functional aspect of ecosytem ?
(1) Energy flow (2) Productivity
(3) Decomposition (4) Stratification

ES0027

28. Vultures in an ecosystem are -
(1) Predators (2) Scavangers
(3) Consumers (4) Top carnivores

ES0028

29. The maximum energy is stored at which of the following trophic level in any ecosystem -
(1) Producers (2) Herbivores
(3) Carnivores (4) Top carnivores

ES0029

30. The source of energy in an ecosystem is -
(1) Sunlight (2) DNA
(3) ATP (4) RNA

ES0030

31. 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

ES0031

32. The importance of ecosystem lies in -
(1) Flow of energy
(2) Cycling of materials
(3) Both the above
(4) None of the above

ES0032

33. 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

ES0033

34. Who proposed that ecosystem is symbol of structure & function of nature -
(1) Gardner (2) Odum
(3) Tansley (4) Reiter

ES0034

35. Largest ecosystem of the world are
(1) Forests (2) Grass lands
(3) Great lakes (4) Oceans

ES0035

36. 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

ES0036

37. A pond is a :-
(1) Biome
(2) Natural ecosystem
(3) Artificial ecosystem
(4) Community of plants & animals
ES0037

38. Nepenthes (Insectivorous pitcher plant) is -
(1) Producer (2) Consumer
(3) Both 1 & 2 (4) None of these
ES0038

39. Which one is omnivorous -
(1) Frog (2) Lion (3) Deer (4) Man
ES0039

40. Which biotic components mainly help in recycling of minerals -
(1) Producers (2) Consumers
(3) Decomposers (4) All the above
ES0040

41. Trophic levels are formed by -
(1) Only plants
(2) Only carnivores
(3) Only animals
(4) Organisms linked in food chain
ES0041

42. In a forest ecosystem green plants are -
(1) Primary producers
(2) Consumers
(3) Primary consumers
(4) Decomposers
ES0042

43. 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
ES0043

44. With regard to ecological food chain, man is a -
(1) Consumer
(2) Producer
(3) Both consumer & producer
(4) decomposer
ES0044

45. 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
ES0045

46. 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
ES0046

47. 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
ES0047

48. 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)
ES0048

49. Path of energy flow in an ecosystem is :
(1) Herbivorous $\rightarrow$ producer $\rightarrow$ carnivorous $\rightarrow$ decomposer
(2) Herbivorous $\rightarrow$ carnivorous $\rightarrow$ producer $\rightarrow$ decomposer
(3) Producer $\rightarrow$ carnivorous $\rightarrow$ herbivorous $\rightarrow$ decomposer
(4) Producer $\rightarrow$ herbivorous $\rightarrow$ carnivorous $\rightarrow$ decomposer
ES0049

50. Pyramids of energy are -
(1) Always upright (2) Always Inverted
(3) Mostly upright (4) Mostly inverted
ES0050

51. The ecological pyramid of numbers in pond ecosystem is -
(1) Upright
(2) Inverted
(3) May upright or Inverted
(4) First upright then inverted
ES0051

52. An ecosystem resists change because it is in a state of-
(1) Homoeostasis
(2) Regular Illumination
(3) Static Imbalance
(4) Food accumination
ES0052

53. 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
ES0053

54. The Pyramid of numbers in grassland ecosystem will be -
(1) Upright (2) Inverted
(3) Irregular (4) Linear
ES0054

55. Which ecosystem has maximum number of producers in an unit area -
(1) Pond (2) Grassland
(3) Forest (4) Tundra
ES0055

56. The storage of energy at consumer level is known as-
(1) Grass primary prduction
(2) Secondary productivity
(3) Net primary productivity
(4) Net productivity
ES0056

57. 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
ES0057

ECOLOGY-ABIOTIC FACTOR TO BIOSPHERE

58. 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
ES0058

59. The bulk of nitrogen in nature is fixed by -
(1) Lighting
(2) Chemical industries
(3) Denitrifying bacteria
(4) Symbiotic bacteria
ES0059

60. 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
ES0060

61. Which is best for plant growth -
(1) Loamy soil
(2) Silt
(3) Sandy soil
(4) Clay soil
ES0061

62. The least porous soil among the following -
(1) Loamy soil
(2) Clay soil
(3) Sandy soil
(4) Peaty soil
ES0062

63. The science dealing with soil is called -
(1) Pedology (2) Acarology
(3) Geology (4) Paleontology
ES0063

64. 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
ES0064

65. The soil near the surface is usually darker then 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

ES0065

66. 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

ES0066

67. 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

ES0067

68. Forests near equator region are called -
(1) Deciduous
(2) Tropical rain forests
(3) Coniferous forests
(4) Temperate forests

ES0068

69. Grass lands with scattered trees are called -
(1) Pampas (2) Steppes
(3) Prairies (4) Savanna

ES0069

70. Temperate evergreen forests in India found in -
(1) Himalaya (2) W. Bengal
(3) Andman (4) Rajasthan

ES0070

71. Which biome refers to arctic desert -
(1) Tundra
(2) Taiga
(3) Savannah
(4) Thar desert

ES0071

72. Which biome is most rich in fauna and flora -
(1) Deciduous forests
(2) Chaparral
(3) Tropical rain forests
(4) Taiga

ES0072

73. Autumn colouration of leaves appear only in -
(1) Tropical regions
(2) evergreen plants
(3) temperate deciduous plants
(4) deserts

ES0073

74. Veldts of Africa & Pampas of south America are
(1) Rain forest biomes
(2) Chaparral biomes
(3) Temperate biomes
(4) Grassland biomes

ES0074

75. Savannahs are :
(1) Tropical rain forest
(2) Desert
(3) Grassland with scattered trees
(4) Dense forest with close canopy

ES0075

76. All the living organisms and non-living factors of the earth constitute -
(1) Biosphere
(2) Community
(3) Biome
(4) Association

ES0076

77. The term biosphere is used for the zone of the earth where life exists -
(1) On the lithospere
(2) In the hydrosphere
(3) In the lithosphere and hydrosphere
(4) In the lithosphere, hydrosphere and atmosphere

ES0077

78. A biosphere is composed of
(1) Living organisms
(2) Living organisms + Lithosphere
(3) Living organisms + lithosphere + atmosphere
(4) Living organisms + lithosphere + atmosphere + hydrosphere

ES0078

ECOLOGY-POLLUTION

79. Bloom occurs in -
(1) Oligotrophic lake (2) Eutrophic lake
(3) Fast flowing river (4) Rain water

EI0079

80. Rhododendron is characteristic vegetation of -
(1) Tropical region
(2) Mangrove
(3) Alpine region
(4) Epiphytes
ES0080

81. Which of the following plant has become a water weed in this country -
(1) Typha (2) Trapa
(3) Cyperus (4) Eichornia
EI0081

82. What is not useful to increase agriculture production
(1) Mechanisation of agriculture
(2) Enhanced irrigation facilities
(3) Use of fertilizers
(4) Deforestation
EI0082

83. Which is normally not an air pollutant -
(1) CO (2) SO_2
(3)Hydrocarbons (4) CO_2
EI0083

84. Acid rains are due to -
(1) O_3 (2) $SO_2 + NO_2$
(3) CO (4) CO_2
EI0084

85. What is found in photochemical smog -
(1) CO (2) NO_2
(3) Ozone (4) 2 and 3 both
EI0085

86. Lichens in a habitat indicates -
(1) Zinc in soil
(2) Copper in soil
(3) Carbon monoxide in air
(4) Lack of air pollution
EI0086

87. Green house effect mainly due to -
(1) SO_2 (2) CO_2
(3) CO (4) O_2
EI0087

88. Which pollutant exhibits biomagnfication in food chain -
(1) DDT (2) SO_2
(3) CO (4) PAN
EI0088

89. Which will not cause any atmoshperic pollution -
(1) Hydrogen
(2) Sulphur dioxide
(3) Carbon dioxide
(4) Carbon monoxide
EI0089

90. Which of the followig is the main factor of water pollution -
(1) Smoke
(2) Industrial waste
(3) Detergent
(4) Ammonia
EI0090

91. Main air pollutant among the following is -
(1) CO (2) CO_2
(3) N_2 (4) Sulphur
EI0091

92. Which is main pollutant responsible for water pollution -
(1) Sound (2) SO_2
(3) Salts of arsenic (4) Sewage
EI0092

93. Which of the following atmospheric pollutants is not produced by the exhaust of motor vehicle in Delhi -
(1) SO_2
(2) Hydrocarbon gases
(3) Fly ash
(4) CO
EI0093

94. Pollution can be controlled by -
(1) Sewage treatment
(2) Checking atomic blasts
(3) Manufacturing electrically operated vehicles
(4) All the above
EI0094

95. 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.
EI0095

96. Exposure of plants to high fluoride concentration results in necrosis or chlorosis characterstically in -
(1) Petiole but not in lamina
(2) Only mid rib in lamina
(3) Leaf tip and leaf margins
(4) Stem tips only

EI0096

97. In cities like Bombay and Calcutta the major air pollutants are -
(1) Ozone
(2) Carbon monoxide and oxides of Sulphur
(3) Hydrocarbons and hot air
(4) Algal spores and marsh gas

EI0097

98. Recent reports of acid rains in industrial cities are due to the effect of atmospheric pollution by -
(1) Excessive release of NO_2 and SO_2 by burning of fossil fuels.
(2) Excessive release of CO_2 by burning of fuel like wood and charcol, cutting of forests and increased animal population.
(3) Excessive release of NH_3 by industrial plants and coal gas.
(4) Excessive release of CO in atmosphere by incomplete combustion of coke, charcoal and other carbonaceous fuels in pancity of oxygen.

EI0098

99. Which is the greatest air pollutant these days ?
(1) Factories
(2) Motor vehicles
(3) Domestic appliances
(4) animals

EIS0099

100. Removal of the soil by the action of wind and water is known as -
(1) Erosion
(2) Fossilization
(3) Leaching
(4) Calcification

EI0100

101. 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

EI0101

102. Photochemical smog was first observed in -
(1) London
(2) Los Angeles
(3) Paris
(4) Tokyo

EI0102

103. Domestic waste will lead to -
(1) Biodegradable pollution
(2) Nondegradable pollution
(3) Thermal pollution of soil
(4) Air pollution

EI0103

104. The major source of BOD in the river Ganga is -
(1) Leaf litter
(2) Fishes
(3) Human waste
(4) Aquatic plants

EI0104

105. 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

EI0105

106. The most harmful air pollutant produced by automobiles is -
(1) HNO_2 (2) NO
(3) SO_2 (4) CO

EI0106

107. Sewage water can be purified by -
(1) Aquatic plant (2) Micro organism
(3) Penicillin (4) Fishes

EI0107

108. Major pollulant in Jet plane emission is -
(1) SO_2 (2) CFC
(3) CO (4) CCl_4

EI0108

109. 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
EI0109

110. Melting of the ice caps might result from -
(1) Depletion of ozone layer
(2) Excess CFC in atmosphere
(3) Excess CO_2 in the atmosphere
(4) Excess water rain
EI0110

111. Cotton dust is an important pollutant in -
(1) Delhi (2) Ahmedabad
(3) Madras (4) Calcutta
EI0111

112. Some effects of SO_2 and its transformation products on plant include -
(1) Chlorophyll destruction
(2) Plasmolysis
(3) Golgi body destruction
(4) None
EI0112

113. All the following contribute to pollution except -
(1) Thermal power plant
(2) Automobiles
(3) Nuclear power plant
(4) Hydroelectric power project
EI0113

114. The molecular action of ultraviolet light is mainly reflected through -
(1) Destruction of hydrogen bonds in DNA
(2) Photodynamic action
(3) Formationof pyrimidine
(4) Formation of sticky metaphase
EI0114

115. 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
EI0115

116. What is B.O.D. :-
(1) The amount of O_2 utilised by organisms in water
(2) The amount of O_2 utilized by micro organisms for decomposition
(3) The total amount of O_2 present in water
(4) All of the above
EI0116

117. What is the intensity of sound in normal conversation
(1) 10 – 20 decibal
(2) 30 – 60 decibal
(3) 70 – 90 decibal
(4) 120 – 150 decibal
EI0117

118. Which of the following is absent in polluted water:-
(1) Hydrilla
(2) Water hyacinth
(3) Larva of stone fly
(4) Blue green algae
EI0118

119. Maximum green house gas released by which country :-
(1) India
(2) France
(3) China
(4) Britain
EI0119

120. Ozone layer of upper atmosphere is being destroyed by :
(1) Sulphurdioxide
(2) Carbondioxide
(3) Chlorofluorocarbon
(4) Smog
EI0120

121. Most hazardous metal pollutant of automobile exhaust is :
(1) Hg (2) Cd
(3) Pb (4) Cu
EI0121

122. B.O.D. is connected with
(1) Organic matter
(2) Microbes
(3) Both
(4) None
EI0122

ECOLOGY-NATURAL RESOURCES

123. 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

EI0123

124. Which is not a renewable source -
(1) Forest (2) Coal
(3) Water (4) Forest organism

EI0124

125. Biosphere refers to
(1) Plants of the world
(2) Special plants
(3) Area occupied by living beings
(4) Plants of a particular area

OP0125

126. Which of the following is the non conventional source of energy
(1) Coal
(2) Petroleum
(3) Electricity from nuclear power plants
(4) Solar radiations

EI0126

127. Petroleum resource is
(1) Renewable
(2) Non renewable
(3) Synthetic
(4) Infinite & nonconventional

EI0127

128. Red data book is famous for -
(1) Extinct plants and animals
(2) Extinct plants only
(3) Endangered plants and animals
(4) Extinct animals only

BC0128

129. 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

BC0129

130. 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

BC0130

131. Which one of the following may be the reason for extinction of plant species due to human activities -
(1) Earthquakes
(2) Pollution
(3) Diseases
(4) Evolution

BC0131

132. 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

BC0132

133. Which of the following species in an endangered state
(1) Indian bustard & rhino
(2) Asiatic donkey
(3) Black buck
(4) All the above

BC0133

134. Wild life protection act was enacted in India in
(1) 1947 (2) 1962
(3) 1972 (4) 1992

BC0134

135. 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

BC0135

136. One of the following is associated with the conservation of forests
(1) Kaziranga
(2) Ghana
(3) Silent valley
(4) Gir

BC0136

EXERCISE-I (Conceptual Questions) ANSWER KEY

Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	**2**	**3**	**2**	**1**	**3**	**1**	**3**	**2**	**2**	**1**	**2**	**1**	**1**	**2**	**2**
Que.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Ans.	**3**	**4**	**2**	**2**	**1**	**4**	**1**	**3**	**1**	**4**	**1**	**4**	**2**	**1**	**1**
Que.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Ans.	**2**	**3**	**1**	**3**	**4**	**3**	**2**	**3**	**4**	**3**	**4**	**1**	**2**	**1**	**1**
Que.	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Ans.	**4**	**1**	**1**	**4**	**1**	**1**	**1**	**4**	**1**	**1**	**2**	**1**	**1**	**4**	**3**
Que.	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Ans.	**1**	**2**	**1**	**3**	**2**	**4**	**4**	**2**	**4**	**1**	**1**	**3**	**3**	**4**	**3**
Que.	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Ans.	**1**	**4**	**4**	**2**	**3**	**4**	**4**	**4**	**2**	**4**	**4**	**2**	**1**	**1**	**2**
Que.	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105
Ans.	**1**	**4**	**3**	**4**	**3**	**3**	**2**	**1**	**2**	**1**	**1**	**2**	**1**	**3**	**3**
Que.	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
Ans.	**4**	**2**	**2**	**2**	**3**	**2**	**1**	**4**	**1**	**3**	**2**	**2**	**3**	**3**	**3**
Que.	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135
Ans.	**3**	**3**	**3**	**2**	**3**	**4**	**2**	**3**	**3**	**3**	**2**	**3**	**4**	**3**	**3**
Que.	136														
Ans.	**3**														

AIPMT 2006

1. Limit of BOD prescribed by Central Pollution Control Board for the discharge of industrial and municipal waste waters into natural surface waters, is
(1) < 100 ppm (2) < 30 ppm
(3) < 3.0 ppm (4) < 10 ppm

EI0137

2. The 'blue baby' syndrome results from
(1) excess of dissolved oxygen
(2) excess of TDS (total dissolved solids)
(3) excess of chloride
(4) methaemoglobinaemia

EI0138

3. Montreal Protocol which calls for appropriate action to protect the ozone layer from human activities was passed in the year
(1) 1988 (2)1985
(3) 1986 (4) 1987

EI0139

4. Niche overlap indicates
(1) sharing of one or more resources between the two species
(2) mutualism between two species
(3) active cooperation between two species
(4) two different parasites on the same host

OP0140

5. Which one of the following is ***not*** used for construction of ecological pyramids ?
(1) Rate of energy flow
(2) Fresh weight
(3) Dry weight
(4) Number of individuals

ES0141

6. Which of the following pairs of an animal and a plant represents endangered organisms in India ?
(1) *Cinchona* and Leopard
(2) Banyan and Black buck
(3) *Bentinckia nicobarica* and Red Panda
(4) Tamarind and Rhesus monkey

BC0142

7. Photochemical smog pollution does ***not*** contain
(1) Carbon dioxide
(2) PAN (peroxy acyl nitrate)
(3) Ozone
(4) Nitrogen dioxide

EI0143

8. Which one of the following is ***not*** included under *in-situ* conservation ?
(1) Biosphere reserve
(2) National park
(3) Sanctuary
(4) Botanical garden

BC0144

9. Which one of the following is the correctly matched pair of an endangered animal and a National Park?
(1) Wild ass — Dudhwa National Park
(2) Great Indian Bustard — Keoladeo National Park
(3) Lion — Corbett National Park
(4) Rhinoceros —Kaziranga National Park

BC0145

10. Which of the following is considered a hot-spot of biodiversity in India ?
(1) Eastern Ghats
(2) Aravalli Hills
(3) Western Ghats
(4) Indo-Gangetic Plain

BC0146

AIPMT 2007

11. Two plants can be conclusively said to belong to the same species if they :
(1) Have same number of chromosomes
(2) Can reproduce freely with each other and form seeds
(3) Have more than 90 percent similar genes
(4) Look similar and possess identical secondary metabolites.

OP0150

12. Identify the odd combination of the habitat and the particular animal concerned :
(1) Rann of Kutch – Wild Ass
(2) Dachigam National Park – Snow Leopard
(3) Sunderbans – Bengal Tiger
(4) Periyar – Elephant

BC0151

13. Which one of the following ecosystem types has the highest annual net primary productivity
(1) Temperate deciduous forest
(2) Tropical rain forest
(3) Tropical deciduous forest
(4) Temperate evergreen forest

ES0152

14. In a coal fired power plant electrostatic precipitators are installed to control emission of:-
(1) CO (2) SO_2
(3) NO_X (4) SPM

EI0153

15. Which one of the following is not a bioindicator of water pollution ?
(1) Sewage fungus
(2) Sludge-worms
(3) Blood-worms
(4) Stone flies

EI0154

16. A high density of elephant population in an area can result in :-
(1) Predation on one another
(2) Mutualism
(3) Intra specific competition
(4) Inter specific competition

OP0155

17. Geometric representation of age structure is a characteristic of :-
(1) Ecosystem
(2) Biotic community
(3) Population
(4) Landscape

DG0156

18. Which one of the following pairs of organisms are exotic species introduced in India ?
(1) Nile perch, *Ficus religiosa*
(2) *Ficus religiosa, Lantana camara*
(3) *Lantana camara*, Water hyacinth
(4) Water hyacinth, *Prosopis cinereria*

BC0157

AIPMT 2008

19. Which one of the following is not observed in biodiversity hotspots ?
(1) Lesser inter–specific competition
(2) Species richness
(3) Endemism
(4) Accelerated species loss

BC0158

20. Which one of the following is the correct percentage of the two (out of the total of 4) green house gases that contribute to the total global warming ?
(1) N_2O 6%, CO_2 86%
(2) Methane 20%, N_2O 18 %
(3) CFCs 14%, Methane 20 %
(4) CO_2 40%, CFCs 30%

EI0159

21. World summit on sustainable Development (2002) was held in:-
(1) Argentina
(2) South Africa
(3) Brazil
(4) Sweden

BC0160

22. About 70% of total global carbon is found in :-
(1) Oceans
(2) Forests
(3) Grassland
(4) Artificial ecosystem

ES0161

23. Quercus species are the dominant component in:-
(1) Scrub forests
(2) Tropical rain forests
(3) Temperate deciduous forests
(4) Alpine forests

ES0162

24. A lake near a village suffered heavy mortality of fishes within a few days. Consider the following reasons for this ?
(a) Lots of urea and phosphate fertilizer were used in the crops in the vicinity
(b) The area was sprayed with DDT by and aircraft
(c) The lake water turned green and stinky
(d) Phytoplankton populations in the lake declined initially thereby greatly reducing photosynthesis.
Which two of the above were the main cause of fish mortality in the lake ?
(1) a, c (2) a, b (3) b, c (4) c, d

ES0163

25. The table below gives the populations (in thousands) of ten species (A–J) in four areas (a–d) consisting of the number of habitats given within brackets against each. Study the table and answer the question which follows :-

Area and Number of habitats	Species and their populations (in thousands) in the areas									
	A	B	C	D	E	F	G	H	I	J
a (11)	2.3	1.2	0.52	6	-	3.1	1.1	9	-	10.3
b (11)	10.2	-	0.62	-	1.5	3	-	8.2	1.1	11.2
c (13)	11.3	0.9	0.48	2.4	1.4	4.2	0.8	8.4	2.2	4.1
d (12)	3.2	10.2	11.1	4.8	0.4	3.3	0.8	7.3	11.3	2.1

Which area out of **a** to **d** shows maximum species diversity ?
(1) d (2) a (3) b (4) c

ES0164

26. Consider the following statements concerning food chains :-
(a) Removal of 80% tigers from an area resulted in greatly increased growth of vegetation
(b) Removal of most of the carnivores resulted in an increased population of deers
(c) The length of food chains is generally limited to 3-4 trophic levels due to energy loss.
(d) The length of food chains may very from 2 to 8 trophic levels.
Which two of the above statements are correct ?
(1) a, d (2) a, b (3) b, c (4) c, d

ES0165

27. According to Central Pollution Control Board (CPCB), which particulate size in diameter (in micrometers) of the air pollutants is responsible for greatest harm to human health ?
(1) 1.0 or less
(2) 5.2 – 2.5
(3) 2.5 or less
(4) 1.5 or less

EI0166

28. The slow rate of decomposition of fallen logs in nature is due to their :-
(1) Anaerobic environment around them
(2) Low cellulose content
(3) Low moisture content
(4) Poor nitrogen content

EI0167

AIPMT 2009

29. Reduction in vascular tissue, mechanical tissue and cuticle is characteristic of :-
(1) Hydrophytes
(2) Xerophytes
(3) Mesophytes
(4) Epiphytes

OP0168

30. Which one of the following types of organisms occupy more than one trophic level in a pond ecosystem ?
(1) Frog
(2) Phytoplankton
(3) Fish
(4) Zooplankton

ES0169

31. Montreal Protocol aims at :-
(1) Control of CO_2 emission
(2) Reduction of ozone depleting substances
(3) Biodiversity conservation
(4) Control of water pollution

EI0170

32. Chipko movement was launched for the protection of :-
(1) Wet lands
(2) Grasslands
(3) Forests
(4) Livestock

EI0171

33. The *correct* sequence of plants in a hydrosere is :-
(1) Oak → Lantana → Volvox → Hydrilla → Pistia → Scirpus
(2) Oak → Lantana → Scirpus → Pistia → Hydrilla → Volvox
(3) Volvox → Hydrilla → Pistia → Scirpus → Lantana → Oak
(4) Pistia → Volvox → Scirpus → Hydrilla → Oak → Lantana

OP0172

34. Steps taken by the Government of India to control air pollution include :-
(1) Use of non-polluting Compressed Natural Gas (CNG) only as fuel by all buses and trucks
(2) Compulsory mixing of 20% ethyl alcohol with petrol and 20% biodiesel with diesel
(3) Compulsory PUC (Pollution Under Control) certification of petrol driven vehicles which tests for carbon monoxide and hydrocarbons
(4) Permission to use only pure diesel with a maximum of 500 ppm sulphur as fuel for vehicles

EI0173

35. Biochemical Oxygen Demand (BOD) in a river water:-
(1) Increases when sewage gets mixed with river water
(2) Remains unchanged when algal bloom occurs
(3) Has no relationship with concentration of oxygen in the water
(4) Gives a measure of *salmonella* in the water

EI0174

36. DDT residues are rapidly passed through food chain causing biomagnification because DDT is :-
(1) Water soluble
(2) Lipo soluble
(3) Moderately toxic
(4) Non-toxic to aquatic animals

EI0175

37. Global agreement in specific control strategies to reduce the release of ozone depleting substances, was adopted by :-
(1) The Vienna Convention
(2) Rio janeiro Conference
(3) The Montreal Protocol
(4) The Koyoto Protocol

EI0176

38. Tiger is *not* a resident in which one of the following national park ?
(1) Jim Corbett
(2) Ranthambhor
(3) Sunderbans
(4) Gir

BC0177

AIPMT 2010

39. The biomass available for consumption by the herbivores and the decomposers is called :
(1) Gross primary productivity
(2) Net primary productivity
(3) Secondary productivity
(4) Standing crop

ES0178

40. Which one of the following is one of the characteristics of a biological community ?
(1) Sex-ratio (2) Stratification
(3) Natality (4) Mortality

OP0179

41. Which one of the following is an example of ex-situ conservation ?
(1) National park
(2) Wildlife sanctuary
(3) Seed bank
(4) Sacred groves

BC0180

42. A renewable exhaustible natural resource is :
(1) Forest (2) Coal
(3) Petroleum (4) Minerals

BC0181

43. The two gases making highest relative contribution to the greenhouse gases are :
(1) CO_2 and N_2O (2) CO_2 and CH_4
(3) CH_4 and N_2O (4) CFC_5 and N_2O

EI0182

44. Select the correct statement from the following :
(1) Activated sludge-sediment in settlement tanks of sewage treatment plant is a rich source of aerobic bacteria
(2) Biogas is produced by the activity of aerobic bacteria on animal waste
(3) *Methanobacterium* is an aerobic bacterium found in rumen of cattle
(4) Biogas commonly called gobar gas, is *pure* methane

EI0183

45. Which two of the, following changes (a-d) usually tend to occur in the plain dwellers when they move to high altitudes (3,500 m or more) ?
(a) Increase in red blood cell size.
(b) Increase in red blood cell production
(c) Increased breathing rate
(d) Increase in thrombocyte count
Changes occurring are :
(1) (a) and (b) (2) (b) and (c)
(3) (c) and (d) (4) (a) and (d)

ES0184

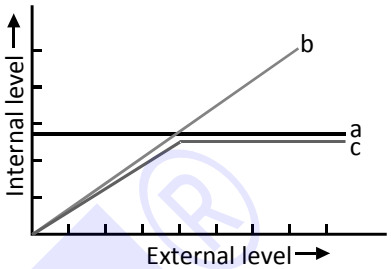
46. dB is a standard abbreviation used for the quantitative expression of :
(1) A certain pesticide
(2) The density of bacteria in a medium
(3) A particular pollutant
(4) The dominant *Bacillus* in a culture

EI0185

47. Study the four statements (a-d) given below and select the two correct ones out of them :
(a) A lion eating a deer and a sparrow feeding on grain are ecologically similar in being consumers
(b) Predator star fish Pisaster helps in maintaining species diversity of some invertebrates
(c) Predators ultimately lead to the extinction of prey species
(d) Production of chemicals such as nicotine, strychnine by the plants are metabolic disorders
The two correct statements are :
(1) (a) and (b) (2) (b) and (c)
(3) (c) and (d) (4) (a) and (d)

ES0186

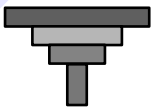
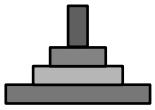
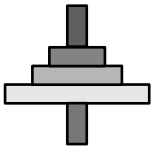
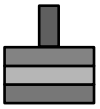
48. The figure given below is a diagrammatic representation of response of organisms to abiotic factors. What do a, b and c represent respectively ?



	(a)	(b)	(c)
(1)	regulator	conformer	partial regulator
(2)	conformer	regulator	partial regulator
(3)	regulator	partial	conformer regulator
(4)	partial	regulator	conformer regulator

ES0187

49. Which of the following representations shows the pyramid of numbers in a forest ecosystem :-

(A) 
(B) 
(C) 
(D) 

(1) A (2) B (3) C (4) D

ES0188

50. Which one of the following is a xerophytic plant in which the stem is modified into a flat, green and succulent structure ?
(1) Casuarina (2) *Hydrilla*
(3) *Acacia* (4) *Opuntia*

ES0189

51. When domestic sewage mixes with river water :-
(1) The increased microbial activity releases micro-nutrients such as iron.
(2) The increased microbial activity uses up dissolved oxygen.
(3) The river water is still suitable for drinking as impurities are only about 0.1%
(4) Small animals like rats will die after drinking river water.

EI0190

52. Which one of the following is most appropriately defined ?
(1) *Amensalism* is a relationship in which one species is benefited where as the other is unaffected.
(2) *Predator* is an organism that catches and kills other organism for food.
(3) *Parasite* is an organism which always lives inside the body of other organism and may kill it.
(4) Host is an organism which provides food to another organism.

BC0191

53. The Indian Rhinoceros is a natural inhabitant of which one of the Indian states ?
(1) Uttar Pradesh
(2) Himachal Pradesh
(3) Assam
(4) Uttarakhand

EI0192

AIPMT 2011

54. Mass of living matter at a trophic level in an area at any time is called :-
(1) Standing crop
(2) Detritus
(3) Humus
(4) Standing state

EI0195

55. Eutrophication is often seen in :-
(1) Deserts
(2) Fresh water lakes
(3) Ocean
(4) Mountains

ES0196

56. Of the total incident solar radiation the proportion of PAR is :-
(1) About 70% (2) About 60%
(3) Less than 50% (4) More than 80%

EI0197

57. Which one of the following pairs of gases are the major cause of "Greenhouse effect" ?
(1) CO_2 and O_3 (2) CO_2 and CO
(3) CFCs and SO_2 (4) CO_2 and N_2O

EI0198

58. Secondary sewage treatement is mainly a :-
(1) Physical process
(2) Mechanical process
(3) Chemical process
(4) Biological process

EI0199

59. Which of the following is mainly produced by the activity of anaerobic bacteria on sewage ?
(1) Laughing gas (2) Propane
(3) Mustard gas (4) Marsh gas

BC0200

60. Which one of the following have the highest number of species in nature ?
(1) Fungi (2) Insects
(3) Birds (4) Angiosperms

ES0201

61. Large Woody Vines are more commonly found in
(1) Temperate forests (2) Mangroves
(3) Tropical rainforests (4) Alpine forests

ES0202

62. Consider the following four conditions (a–d) and select the correct pair of them as adaptation to environment in desert lizards.
The conditions :-
(a) Burrowing in soil to escape high temperature
(b) Losing heat rapidly from the body during high temperature
(c) Bask in sun when temperature is low
(d) Insulating body due to thick fatty dermis
Options :
(1) (c), (d) (2) (a), (c)
(3) (b), (d) (4) (a), (b)

OP0203

63. Which one of the following statements is correct for secondary succession ?
(1) It begins on a bare rock
(2) It occurs on a deforested site
(3) It follows primary succession
(4) It is similar to primary succession expect that it has a relatively fast pace.

OP0204

64. Which one of the following is categorised as a *parasite* in true sense ?
(1) The female *Antopheles* bites and sucks blood from humans.
(2) Human foetus developing inside the uterus draws nourishment from the mother.
(3) Head louse living on the human scalp as well as laying eggs on human hair.
(4) The cuckoo (koel) lays its eggs in crow's nest.

OP0205

65. Which one of the following statements for pyramid of energy is incorrect, whereas the remaining three are correct ?
(1) Its base is broad
(2) It shows energy content of different trophic level organisms
(3) It is inverted in shape
(4) It is upright in shape

ES0206

66. Which one of the following statements is wrong in case of Bhopal tragedy ?
(1) Methyl Isocyanate gas leakage took place
(2) Thousands of human beings died
(3) Radioactive fall out engulfed Bhopal
(4) It took place in the night of December 2/3, 1984

EI0207

67. Which one of the following shows maximum genetic diversity in India ?
(1) Groundnut
(2) Rice
(3) Maize
(4) Mango

BC0208

68. Both, hydrarch and xerarch successions lead to :
(1) Excessive wet conditions
(2) Medium water conditions
(3) Xeric conditions
(4) Highly dry conditions

OP0209

69. Which one of the following animals may occupy more than one trophic levels in the same ecosystem at the same time ?
(1) Frog (2) Sparrow
(3) Lion (4) Goat

ES0210

70. The breakdown of detritus into smaller particles by earthworm is a process called :
(1) Catabolism (2) Humification
(3) Fragmentation (4) Mineralisation

ES0211

71. "Good ozone" is found in the :
(1) Ionosphere (2) Mesosphere
(3) Troposphere (4) Stratosphere

EI0212

72. Consider the following statements (A)-(D) each with one or two blanks.
(A) Bears go into .....(1)..... during winter to .....(2)..... cold weather
(B) A conical age pyramid with a broad base represents .....(3)..... human population.
(C) A wasp pollinating a fig flower is an example of .....(4)....
(D) An area with high levels of species richness is known as .....(5)....
Which one of the following options, gives the correct fill ups for the respective blank numbers from (1) to (5) in the statements?
(1) (1) - hibernation, (2) - escape, (3) - expanding, (5) - hot spot,
(2) (3) - stable (4) - commensalism, (5) - marsh
(3) (1) - aestivation, (2) - escape, (3) - stable, (4) mutualism
(4) (3) - expanding, (4) commensalism, (5) - biodiversity park

ES0213

73. Biodiversity of a geographical region represents :
(1) Species endemic to the region
(2) Endangered species found in the region
(3) The diversity in the organisms living in the region.
(4) Genetic diversity present in the dominant species of the region.

BC0214

AIPMT Pre.-2012

74. Which one of the following statements regarding photochemical smog is not correct?
(1) Photochemical smog is formed through photochemical reaction involving solar energy
(2) Photochemical smog does not cause irritation in eyes and throat.
(3) Carbon monoxide does not play any role in photochemical smog formation
(4) Photochemical smog is an oxidising agent in character

EI0219

75. Which one of the following areas in India, is a hot spot of biodiversity ?
(1) Sunderbans
(2) Western Ghats
(3) Eastern Ghats
(4) Gangetic plain

BC0220

76. Which one of the following is not a functional unit of an ecosystem :-
(1) Productivity
(2) Stratification
(3) Energy flow
(4) Decomposition

ES0221

77. The upright pyramid of number is absent in :-
(1) Lake (2) Grassland
(3) Pond (4) Forest

ES0222

78. Which one of the following is not a gaseous biogeochemical cycle in ecosystem ?
(1) Nitrogen cycle (2) Carbon cycle
(3) Sulphur cycle (4) Phosphorus cycle

ES0223

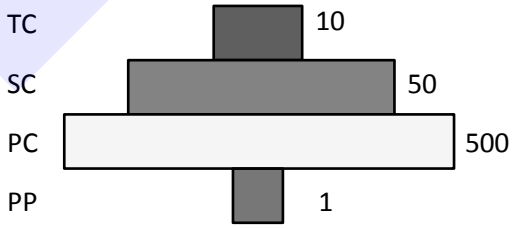
79. Which one of the following is a wrong statement?
(1) Greenhouse effect is a natural phenomenon
(2) Eutrophication is a natural phenomenon in freshwater bodies
(3) Most of the forests have been lost in tropical areas
(4) Ozone in upper part of atmosphere is harmful to animals

EI0224

80. The highest number of species in the world is represented by :-
(1) Algae
(2) Lichens
(3) Fungi
(4) Mosses

BC0225

81. Given below is an imaginary pyramid of numbers. What could be one of the possibilities about certain organisms at some of the different levels?



(1) Level one PP is "Pipal trees" and the level SC is "sheep"
(2) Level PC is "rats" and level SC is "cats"
(3) Level PC is "insects" and level SC is "small insectivorous birds
(4) Level PP is "Phytoplanktons" in sea and "Whale" on top level TC.

ES0226

82. Identify the possible link "A" in the following food chain :
Plant → Insect → Frog → "A" → Eagle
(1) Cobra
(2) Parrot
(3) Rabbit
(4) Wolf

ES0227

83. Measuring Biochemical Oxygen Demand (BOD) is a method used for :

(1) Measuring the activity of *Saccharomyces cerevisae* in producing curd on a commercial scale.

(2) Working out the efficiency of R.B.Cs. about their capacity to carry oxygen.

(3) Estimating the amount of organic matter in sawage water.

(4) Working out the efficiency of oil driven automobile engines.

EI0228

84. People who have migrated from the planes to an area adjoining Rohtang pass about six months back:

(1) suffer from altitude sickness with symptoms like nausea, fatigue, etc.

(2) have the usual RBC count but their haemoglobin has very high binding affinity to O_2

(3) have more RBCs and their haemoglobin has a lower binding affinity to O_2

(4) are not physically fit to play games like football.

ES0229

AIPMT Mains-2012

85. The second stage of hydrosere is occupied by plants like :-

(1) *Salix*

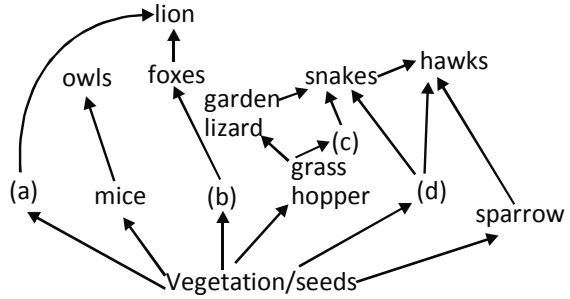
(2) *Vallisneria*

(3) *Azolla*

(4) *Typha*

OP0230

86. Identify the likely organisms (a), (b), (c) and (d) in the food web shown below :



Options :

	(a)	(b)	(c)	(d)
(1)	rat	dog	tortoise	crow
(2)	squirrel	cat	rat	pigeon
(3)	deer	rabbit	frog	rat
(4)	dog	squirrel	bat	deer

ES0231

87. In gobar gas, the maximum amount is that of :-

(1) Propane (2) Carbon dioxide

(3) Butane (4) Methane

EI0232

88. Select the correct statement about biodiversity :-

(1) Western Ghats have a very high degree of species richness and endemism.

(2) Conservation of biodiversity is just a fad pursued by the developed countries

(3) The desert areas of Rajasthan and Gujarat have a very high level of desert animal species as well as numerous rare animals

(4) Large scale planting of Bt cotton has no adverse effect on biodiversity

BC0233

89. *Cuscuta* is an example of :-

(1) Predation

(2) Endoparasitism

(3) Ectoparasitism

(4) Brood parasitism

OP0234

90. Sacred groves are specially useful in :-

(1) year round flow of water in rivers

(2) conserving rare and threatened species

(3) generating environmental awareness

(4) preventing soil erosion

BC0235

91. The rate of formation of new organic matter by rabbit in a grassland, is called :-

(1) Net primary productivity

(2) Gross primary productivity

(3) Net productivity

(4) Secondary productivity

ES0236

92. The domestic sewage in large cities :
(1) When treated in STPs does not really require the aeration step as the sewage contains adequate oxygen
(2) has very high amounts of suspended solids and dissolved salts.
(3) has a high BOD as it contains both aerobic and anaerobic bacteria
(4) is processed by aerobic and then anaerobic bacteria in the secondary treatment in Sewage Treatment plants (STPs)

EI0237

NEET-UG 2013

93. A sedentary sea anemone gets attached to the shell lining of hermit crab. The association is :
(1) Amensalism
(2) Ectoparasitism
(3) Symboisis
(4) Commensalism

OP0241

94. Kyoto Protocol was endorsed at :
(1) CoP - 4 (2) CoP - 3
(3) CoP - 5 (4) CoP - 6

EI0242

95. Secondary productivity is rate of formation of new organic matter by :
(1) Decomposer (2) Producer
(3) Parasite (4) Consumer

ES0243

96. Which one of the following processes during decomposition is **correctly** described ?
(1) Leaching – Water soluble inorganic nutrients rise to the top layers of soil
(2) Fragmentation – Carried out by organisms such as earthworm
(3) Humification – Leads to the accumulation of a dark coloured substance humus which undergoes microbial action at a very fast rate
(4) Catabolism – Last step in the decomposition under fully anaerobic condition

ES0244

97. Which of the following represents maximum number of species among global biodiversity ?
(1) Mosses and Ferns
(2) Algae
(3) Lichens
(4) Fungi

BC0245

98. The Air Prevention and Control of Pollution Act came into force in :
(1) 1990 (2) 1975
(3) 1981 (4) 1985

EI0246

99. Global warming can be controlled by :
(1) Increasing deforestation, reducing efficiency of energy usage
(2) Reducing deforestation cutting down use of fossil fuel
(3) Reducing reforestation, increasing the use of fossil fuel
(4) Increasing deforestation slowing down the growth human population

EI0247

100. Which one of the following is not used for *ex situ* plant conservation ?
(1) Botanical Gardens
(2) Field gene banks
(3) Seed banks
(4) Shifting cultivation

BC0248

101. During sewage treatment, biogases are produced which include :
(1) hydrogensulphide, nitrogen, methane
(2) methane, hydrogensulphide, carbon dioxide
(3) methane, oxygen, hydrogensulphide
(4) hydrogensulphide, methane, sulphur dioxide

EI0249

AIPMT 2014

102. An example of ex situ conservation is :-
(1) National Park
(2) Seed Bank
(3) Wildlife Sanctuary
(4) Sacred Grove

BC0253

103. A location with luxuriant growth of lichens on the trees indicates that the :-
(1) Trees are very healthy
(2) Trees are heavily infested
(3) Location is highly polluted
(4) Location is not polluted

EI0254

104. A species facing extremely high risk of extinction in the immediate future is called :-
(1) Vulnerable
(2) Endemic
(3) Critically Endangered
(4) Extinct

BC0255

105. The zone of atmosphere in which the ozone layer is present is called :-
(1) Ionosphere (2) Mesosphere
(3) Stratosphere (4) Troposphere

EI0256

106. The organization which publishes the Red List of species is :-
(1) ICFRE (2) IUCN
(3) UNEP (4) WWF

BC0257

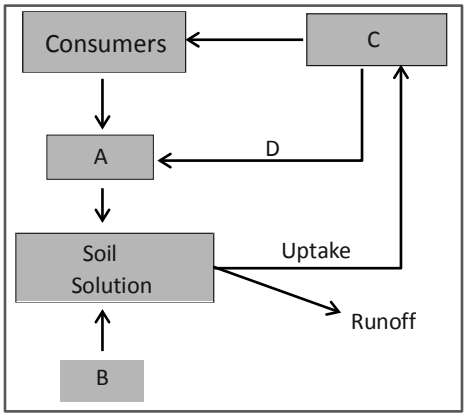
107. What gases are produced in anaerobic sludge digesters :-
(1) Methane and CO_2 only
(2) Methane, Hydrogen Sulphide and CO_2
(3) Methane, Hydrogen Sulphide and O_2
(4) Hydrogen Sulphide and CO_2

EI0258

108. Just as a person moving from Delhi to Shimla to escape the heat for the duration of hot summer, thousands of migratory birds from Siberia and other extremely cold northern regions move to :-
(1) Western Ghat
(2) Meghalaya
(3) Corbett National Park
(4) Keolado National Park

ES0259

109. Given below is a simplified model of phosphorus cycling in a terrestrial ecosystem with four blanks (A-D). Identify the blanks :-

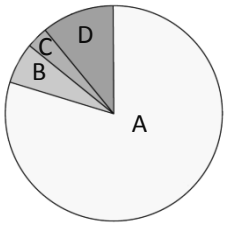


Options :

	A	B	C	D
(1)	Rock minerals	Detritus	Litter fall	Producers
(2)	Litter fall	Producers	Rock minerals	Detritus
(3)	Detritus	Rock minerals	Producer	Litter fall
(4)	Producers	Litter fall	Rock minerals	Detritus

ES0260

110. Given below is the representation of the extent of global diversity of *invertebrates.* What groups the four portions (A-D) represent respectively :-



Options :

	A	B	C	D
(1)	Insects	Crustaceans	Other animal groups	Molluscs
(2)	Crustaceans	Insects	Molluscs	Other animal groups
(3)	Molluscs	Other animal groups	Crustaceans	Insects
(4)	Insects	Molluscs	Crustaceans	Other animal groups

BC0261

111. A scrubber in the exhaust of a chemical industrial plant removes :-
(1) gases like sulphur dioxide
(2) particulate matter of the size 5 micrometer or above
(3) gases like ozone and methane
(4) particulate matter of the size 2.5 micrometer or less

EI0262

112. If 20 J of energy is trapped at producer level, then how much energy will be available to peacock as food in the following chain ?
plant → mice → snake → peacock
(1) 0.02 J
(2) 0.002 J
(3) 0.2 J
(4) 0.0002 J

ES0263

AIPMT 2015

113. Cryopreservation of gametes of threatened species in viable and fertile condition can be referred to as:-
(1) Advanced ex-situ conservation of biodiversity
(2) In situ conservation by sacred groves
(3) In situ cryo-conservation of biodiversity
(4) In situ conservation of biodiversity

BC0268

114. High value of BOD (Biochemical Oxygen Demand) indicates that :-
(1) Water is highly polluted
(2) Water is less polluted
(3) Consumption of organic matter in the water is higher by the microbes
(4) Water is pure

EI0269

115. The UN Conference of Parties on climate change in the year 2011 was held in :-
(1) South Africa
(2) Peru
(3) Qatar
(4) Poland

EI0270

116. Rachel Carson's famous book "Silent Spring" is related to :-
(1) Noise pollution
(2) Population explosion
(3) Ecosystem management
(4) Pesticide pollution

EI0271

117. Most animals are tree dwellers in a:-
(1) Thorn woodland
(2) Temperate deciduous forest
(3) Tropical rain forest
(4) Coniferous forest

ES0272

118. In which of the following both pairs have **correct** combination :-
(1) *In situ* conservation : Cryopreservation
Ex situ conservation : Wildlife Sanctuary
(2) *In situ* conservation : Seed Bank
Ex situ conservation : National Park
(3) *In situ* conservation : Tissue culture
Ex situ conservation : Sacred groves
(4) *In situ* conservation : National Park
Ex situ conservation : Botanical Garden

BC0273

119. Vertical distribution of different species occupying different levels in a biotic community is known as:
(1) Stratification
(2) Zonation
(3) Pyramid
(4) Divergence

OP0274

120. The mass of living material at a trophic level at a particular time is called :
(1) Standing state
(2) Net primary productivity
(3) Standing crop
(4) Gross primary productivity

ES0275

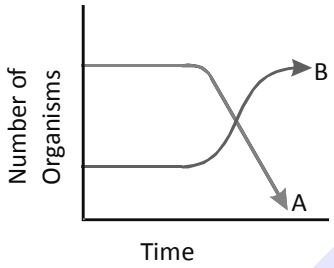
121. In an ecosystem the rate of production of organic matter during photosynthesis is termed as:
(1) Gross primary productivity
(2) Secondary productivity
(3) Net productivity
(4) Net primary productivity

ES0276

122. Secondary Succession takes place on/in :
(1) Degraded forest
(2) Newly created pond
(3) Newly cooled lava
(4) Bare rock

OP0277

123. The following graph depicts changes in two populations (A and B) of herbivores in a grassy field A possible reason for these changes is that :



(1) Population B competed more successfully for food than population A
(2) Population A produced more offspring than population B
(3) Population A consumed the members of population B
(4) Both plant populations in this habitat decreased

OP0278

Re-AIPMT 2015

124. Most animals that live in deep oceanic waters are:
(1) Detritivores
(2) Primary consumers
(3) Secondary consumers
(4) Tertiary consumers

ES0279

125. An association of individuals of different species living in the same habitat and having functional interactions is :
(1) Population (2) Ecological niche
(3) Biotic community (4) Ecosystem

OP0280

126. In which of the following both pairs have **correct** combination ?

(1)	Gaseous nutrient cycle	Sulphur and Phosphorus
	Sedimentary nutrient cycle	Carbon and Nitrogen
(2)	Gaseous nutrient cycle	Carbon and Nitrogen
	Sedimentary nutrient cycle	Sulphur and Phosphorus
(3)	Gaseous nutrient cycle	Carbon and sulphur
	Sedimentary nutrient cycle	Nitrogen and phosphorus
(4)	Gaseous nutrient cycle	Nitrogen and sulphur
	Sedimentary nutrient cycle	Carbon and Phosphorus

ES0281

127. In which of the following interactions both partners are adversely affected ?
(1) Mutualism (2) Competition
(3) Predation (4) Parasitism

OP0282

128. The species confined to a particular region and not found elsewhere is termed as :
(1) Rare (2) Keystone
(3) Alien (4) Endemic

BC0283

129. Eutrophication of water bodies leading to killing of fishes is mainly due to non-availability of :
(1) oxygen
(2) food
(3) light
(4) essential minerals

EI0284

130. Acid rain is caused by increase in the atmospheric concentration of :
(1) O_3 and dust (2) SO_2 and NO_2
(3) SO_3 and CO (4) CO_2 and CO

EI0285

131. Increase in concentration of the toxicant at successive trophic levels is known as :
(1) Biogeochemical cycling
(2) Biomagnification
(3) Biodeterioration
(4) Biotransformation

EI0286

132. During ecological succession :
(1) the changes lead to a community that is in near equilibrium with the environment and is called pioneer community
(2) the gradual and predictable change in species composition occurs in a given area
(3) the establishment of a new biotic community is very fast in its primary phase
(4) the numbers and types of animals remain constant

OP0287

133. Which the following are most suitable indicators of SO_2 pollution in the environment ?
(1) Fungi
(2) Lichens
(3) Conifers
(4) Algae

EI0288

134. The UN conference of Parties on climate change in the year 2012 was held at :
(1) Warsaw
(2) Durban
(3) Doha
(4) Lima

EI0289

NEET-I 2016

135. Gause's principle of competitive exclusion states that :
(1) More abundant species will exclude the less abundant species through competition.
(2) Competition for the same resources excludes species having different food preferences.
(3) No two species can occupy the same niche indefinitely for the same limiting resources.
(4) Larger organisms exclude smaller ones through competition.

OP0293

136. A system of rotating crops with legume or grass pasture to improve soil structure and fertility is called:-
(1) Ley farming
(2) Contour farming
(3) Strip farming
(4) Shifting agriculture

ES0294

137. Which is the National Aquatic Animal of India ?
(1) Gangetic shark
(2) River dolphin
(3) Blue whale
(4) Sea-horse

BC0295

138. Which of the following is the most important cause of animals and plants being driven to extinction ?
(1) Over - exploitation
(2) Alien species invasion
(3) Habitat loss and fragmentation
(4) Co-extinctions

BC0296

139. Which of the following is a characteristic feature of cropland ecosystem ?
(1) Absence of soil organisms
(2) Least genetic diversity
(3) Absence of weeds
(4) Ecological succession

ES0297

140. Joint Forest Management Concept was introduced in India during :
(1) 1960 s (2) 1970 s
(3) 1980 s (4) 1990 s

EI0298

141. The term ecosystem was coined by :-
(1) E.P. Odum (2) A.G. Tansley
(3) E. Haeckel (4) E. Warming

ES0299

142. Which of the following would appear as the pioneer organisms on bare rocks?
(1) Lichens (2) Liverworts
(3) Mosses (4) Green algae

OP0300

143. A river with an inflow of domestic sewage rich in organic waste may result in :-
(1) Drying of the river very soon due to algal bloom.
(2) Increased population of aquatic food web organisms.
(3) An increased production of fish due to biodegradable nutrients.
(4) Death of fish due to lack of oxygen.

EI0301

NEET-II 2016

144. How many hot spots of biodiversity in the world have been identified till date by Norman Myers ?
(1) 34 (2) 43 (3) 17 (4) 25

BC0302

145. The primary producers of the deep-sea hydrothermal vent ecosystem are :
(1) Blue-green algae
(2) Coral reefs
(3) Green algae
(4) Chemosynthetic bacteria

ES0303

146. Which of the following is correct for r-selected species ?
(1) Small number of progeny with small size
(2) Small number of progeny with large size
(3) Large number of progeny with small size
(4) Large number of progeny with large size

DG0304

147. Red list contains data or information on :
(1) threatened species
(2) marine vertebrates only
(3) all economically important plants
(4) plants whose products are in international trade

BC0305

148. Biochemical Oxygen Demand (BOD) may **not** be a good index for pollution for water bodies receiving effluents from :-
(1) Petroleum industry
(2) Sugar industry
(3) Domestic sewage
(4) Dairy industry

EI0306

149. The principle of competitive exclusion was stated by :-
(1) MacArthur (2) Verhulst and Pearl
(3) C. Darwin (4) G.F. Gause

OP0307

150. Which of the following National Parks is home to the famous musk deer or hangul?
(1) Eaglenest Wildlife Sanctuary, Arunachal Pradesh
(2) Dachigam National Park, Jammu & Kashmir
(3) Keibul Lamjao National Park, Manipur
(4) Bandhavgarh National Park, Madhya Pradesh

BC0308

151. A lake which is rich in organic waste may result in:-
(1) Increased population of fish due to lots of nutrients.
(2) Mortality of fish due to lack of oxygen
(3) Increased population of aquatic organisms due to minerals
(4) Drying of the lake due to algal bloom

EI0309

152. The highest DDT concentration in aquatic food chain shall occur in :-
(1) crab (2) eel
(3) phytoplankton (4) seagull

EI0310

NEET(UG) 2017

153. Which one of the following is related to Ex-situ conservation of threatened animals and plants ?
(1) Biodiversity hot spots
(2) Amazon rainforest
(3) Himalayan region
(4) Wildlife safari parks

EC0315

154. Which of the following in sewage treatment removes suspended solids ?
(1) Secondary treatment
(2) Primary treatment
(3) Sludge treatment
(4) Tertiary treatment

EI0316

155. Which ecosystem has the maximum biomass ?
(1) Grassland ecosystem
(2) Pond ecosystem
(3) Lake ecosystem
(4) Forest ecosystem

ES0317

156. Presence of plants arranged into well defined vertical layers depending on their height can be seen best in:
(1) Tropical Rain Forest
(2) Grassland
(3) Temperate Forest
(4) Tropical Savannah

ES0318

157. Alexander Von Humbolt described for the first time:
(1) Laws of limiting factor
(2) Species area relationships
(3) Population Growth equation
(4) Ecological Biodiversity

BC0319

158. Mycorrhizae are the example of:
(1) Amensalism
(2) Antibiosis
(3) Mutualism
(4) Fungistasis

OP0320

159. Which one of the following statements is not valid for aerosols ?
(1) They alter rainfall and monsoon patterns
(2) They cause increased agricultural productivity
(3) They have negative impact on agricultural land
(4) They are harmful to human health

EI0321

160. The region of Biosphere Reserve which is legally protected and where no human activity is allowed is known as:
(1) Buffer zone
(2) Transition zone
(3) Restoration zone
(4) Core zone

BC0322

161. Which of the following ecologists has tried to put price-tags on nature's life support services ?
(1) David Tilman
(2) Robert Constanza
(3) Paul Ehrlich
(4) Robert May

ES0323

162. In a hypothetical population of 100 individual having 'r' = 0.5/female/year, what will be the population size in 6 years (with e = 2.72) showing exponential rate of growth ?
(1) 1218 (2) 739 (3) 2012 (4) 448

DG0324

163. The increase in concentration of the toxicant at successive trophic levels is referred to as:
(1) Eutrophication (2) Bioremediation
(3) Biotransformation (4) Biomagnification

EI0325

164. The sequential events from initial stage till climax
stage in a succession are called :-
(1) Ecesis (2) Sere
(3) Nudation (4) Migration

EI0326

165. To protect and improve the quality of environment, the Government of India passed the Environment (Protection) Act in the year:
(1) 1953 (2) 1923
(3) 1986 (4) 1968

EI0327

166. Tree planting helps reduce global warming as trees:
(1) Give out O_2
(2) Create shade thereby cooling the ground
(3) Can sequester CO_2
(4) Can respire in light

EI0328

167. Van Mahotsava is a festival of:
(1) Planting trees in open areas
(2) Taking oath to protect trees
(3) Worshipping trees
(4) Conservation of sacred groves

EI0329

168. Which scientist proposed 'Rivet popper hypothesis' related to biodiversity and Ecosystems?
(1) Alexander von Humboldt
(2) Paul Ehrlich
(3) David Tilman
(4) Tansley

BC0330

169. Which of the following statements is **not true** ?
(1) A single organism can feed at several trophic levels
(2) Detritivores feed at all trophic levels except the producer level
(3) Primary consumers are herbivores
(4) Energy pyramids of an ecosystem tend to diminish at higher trophic levels

ES0331

NEET(UG) 2018

170. In stratosphere, which of the following element acts as a catalyst in degradation of ozone and release of molecular oxygen ?
(1) Carbon (2) Cl
(3) Fe (4) Oxygen

EI0332

171. Which of the following is a secondary pollutant
(1) CO (2) CO_2 (3) SO_2 (4) O_3

EI0333

172. Niche is
(1) all the biological factors in the organism environment
(2) the physical space where an organism live
(3) the range of temperature that the organism needs to live
(4) the functional role played by the organism where it lives

OP0334

173. What type of ecological pyramid would obtained with the following data ?
Secondary consumer : 120 g
Primary consumer : 60 g
Primary producer : 10 g
(1) Inverted pyramid of biomass
(2) Pyramid of energy
(3) Upright pyramid of numbers
(4) Upright pyramid of biomass

ES0335

174. World Ozone Day is celebrated on
(1) 5th June (2) 21st April
(3) 16th September (4) 22nd April

EI0336

175. Which one of the following plants shows a very close relationship with a species of moth, where none of the two can complete its life cycle without the other?
(1) *Hydrilla* (2) *Yucca*
(3) Banana (4) *Viola*

ES0337

176. All of the following are included in 'Ex-situ conservation' *except*
(1) Wildlife safari parks
(2) Sacred groves
(3) Botanical gardens
(4) Seed banks

BC0338

177. Match the items given in Column I with those in Column II and select the ***correct*** option given below:

	Column I	**Column II**
a.	Eutrophication	i. UV-B radiation
b.	Sanitary landfill	ii. Deforestation
c.	Snow blindness	iii. Nutrient enrichment
d.	Jhum cultivation	iv. Waste disposal

	a	**b**	**c**	**d**
(1)	ii	i	iii	iv
(2)	i	iii	iv	ii
(3)	iii	iv	i	ii
(4)	i	ii	iv	iii

EI0339

178. Which one of the following population interactions is widely used in medical science for the production of antibiotics ?
(1) Commensalism
(2) Mutualism
(3) Parasitism
(4) Amensalism

OP0340

179. Which of the following is an occupational respiratory disorder ?
(1) Anthracis
(2) Silicosis
(3) Botulism
(4) Emphysema

EI0341

NEET(UG) 2019

180. Which one of the following is **not** a method of *in situ* conservation of biodiversity ?
(1) Biosphere Reserve
(2) Wildlife Sanctuary
(3) Botanical Garden
(4) Sacred Grove

BC0502

181. Which of these following methods is the most suitable for disposal of nuclear waste ?
(1) Shoot the waste into space
(2) Bury the waste under Antarctic ice-cover
(3) Dump the waste within rocks under deep ocean
(4) Burry the waste within rocks deep below the Earth's surface

EI0503

182. Which of the following pairs of gases is mainly responsible for green house effect?
(1) Ozone and Ammonia
(2) Oxygen and Nitrogen
(3) Nitrogen and Sulphur dioxide
(4) Carbon dioxide and Methane

EI0504

183. Which of the following protocols did aim for reducing emission of chloroflurocarbons into the atmosphere?
(1) Montreal protocol
(2) Kyoto protocol
(3) Gothenburg Protocol
(4) Geneva Protocol

EI0505

184. Polyblend, a fine powder of recycled modified plastic, has proved to be a good material for:
(1) making plastic sacks
(2) use as a fertilizer
(3) construction of roads
(4) making tubes and pipes

EI0506

185. The Earth Summit held in Rio de Janeiro in 1992 was called :
(1) to reduce CO_2 emissions and global warming.
(2) for conservation of biodiversity and sustainable utilization of its benefits.
(3) to assess threat posed to native species by invasive weed species.
(4) for immediate steps to discontinue use of CFCs that were damaging the ozone layer.

EI0507

186. Which of the following ecological pyramids is generally inverted ?
(1) Pyramid of numbers in grassland
(2) Pyramid of energy
(3) Pyramid of biomass in a forest
(4) Pyramid of biomass in a sea

ES0508

187. Which of the following is the most important causes for animals and plants being driven to extinction?
(1) Habitat loss and fragmentation
(2) Drought and floods
(3) Economic exploitation
(4) Alien species invasion

BC0509

NEET(UG) 2019 (Odisha)

188. Carnivorous animals - lions and leopards, occupy the same niche but lions predate mostly larger animals and leopards take smaller ones. This mechanism of competition is referred to as :-
(1) Character displacement
(2) Altruism
(3) Resource partitioning
(4) Competitive exclusion

OP0510

189. Decline in the population of indian native fishes due to introduction of *Clarias gariepinus* in river Yamuna can be categoriesd as :-
(1) Co-extinction
(2) Habitat fragmentation
(3) Over exploitation
(4) Alien species invasion

BC0511

190. Western Ghats have a large number of plant and animal species that are not found anywhere else. Which of the following terms will you use to notify such species?
(1) Endemic (2) Vulnerable
(3) Threatened (4) Keystone

BC0512

191. Which of the following is an innovative remedy for plastic waste?
(1) Burning in the absence of oxygen
(2) Burrying 500 m deep below soil surface
(3) Polyblend
(4) Electrostatic precipitator

EI0513

192. Between which among the following, the relationship is not an example of commensalism?
(1) Orchid and the tree on which it grows
(2) Cattle Egret and grazing cattle
(3) Sea Anemone and Clown fish
(4) Female wasp and fig species

OP0514

193. If an agricultural field is liberally irrigated for a prolonged period of time, it is likely to face problem of:
(1) Metal toxicity (2) Alkalinity
(3) Acidity (4) Salinity

ES0515

194. Which of the following statements about ozone is correct?
(1) Tropospheric ozone protects us from UV radiations.
(2) Stratospheric ozone is 'bad'
(3) Tropospheric ozone is 'good'
(4) Stratospheric ozone protects us from UV radiations.

EI0516

195. Exploration of molecular, genetic and species level diversity for novel products of economic importance is known as:
(1) Biopiracy
(2) Bioenergetics
(3) Bioremediation
(4) Bioprospecting

BC0517

NEET(UG) 2020

196. According to Robert May, the global species diversity is about :
(1) 7 million (2) 1.5 million
(3) 20 million (4) 50 million

BC0518

197. Match the trophic levels with their **correct** species examples in grassland ecosystem.

(a) Fourth trophic level	(i) Crow
(b) Second trophic level	(ii) Vulture
(c) First trophic level	(iii) Rabbit
(d) Third trophic level	(iv) Grass

Select the **correct** option :

	(a)	(b)	(c)	(d)
(1)	(i)	(ii)	(iii)	(iv)
(2)	(ii)	(iii)	(iv)	(i)
(3)	(iii)	(ii)	(i)	(iv)
(4)	(iv)	(iii)	(ii)	(i)

ES0519

198. In relation to Gross primary productivity and Net primary productivity of an ecosystem, which one of the following statements is **correct** ?
(1) There is no relationship between Gross primary productivity and Net primary productivity.
(2) Gross primary productivity is always less than net primary productivity.
(3) Gross primary productivity is always more than net primary productivity.
(4) Gross primary productivity and Net primary productivity are one and same.

ES0520

199. Snow-blindness in Antarctic region is due to :
(1) Damage to retina caused by infra-red rays
(2) Freezing of fluids in the eye by low temperature
(3) Inflammation of cornea due to high dose of UV-B radiation
(4) High reflection of light from snow

EI0521

200. Which of the following is put into Anaerobic sludge digester for further sewage treatment ?
(1) Activated sludge
(2) Primary sludge
(3) Floating debris
(4) Effluents of primary treatment

EI0522

201. Which of the following regions of the globe exhibits highest species diversity?
(1) Amazon forests
(2) Western Ghats of India
(3) Madagascar
(4) Himalayas

BC0523

202. Montreal protocol was signed in 1987 for control of :
(1) Disposal of e-wastes
(2) Transport of Genetically modified organisms from one country to another
(3) Emission of ozone depleting substances
(4) Release of Green House gases

EI0524

NEET(UG) 2020 (Covid-19)

203. Which of the following statements is **incorrect**?
(1) Biomass decreases from first to fourth trophic level
(2) Energy content gradually increases from first to fourth trophic level
(3) Number of individuals decreases from first trophic level to fourth trophic level
(4) Energy content gradually decreases from first to fourth trophic level

ES0525

204. A species which was introduced for ornamentation but has become a trouble-some weed in India :
(1) *Parthenium hysterophorus*
(2) *Eichhornia crassipes*
(3) *Prosopis juliflora*
(4) *Trapa spinosa*

EI0526

205. In the following in each set a conservation approach and an example of method of conservation are given
(a) In situ conservation - Biosphere Reserve
(b) Ex situ conservation - Sacred groves
(c) In situ conservation - Seed bank
(d) Ex situ conservation - Cryopreservation
Select the option with correct match of approach and method :
(1) (a) and (c) (2) (a) and (d)
(3) (b) and (d) (4) (a) and (b)

BC0527

206. Air (Prevention and Control of Pollution) Act was amended in 1987 to include among pollutants
(1) Vehicular exhaust
(2) Allergy causing pollen
(3) Noise
(4) Particulates of size 2.5 micrometer or below

EI0528

207. Which of the following statements is incorrect regarding the phosphorus cycle?
(1) Phosphates are the major form of phosphorus reservoir
(2) Phosphorus solubilising bacteria facilitate the release of phosphorus from organic remains
(3) There is appreciable respiratory release of phosphorus into atmosphere
(4) It is sedimentary cycle

ES0529

208. The rate of decomposition is faster in the ecosystem due to following factors EXCEPT:
(1) Detritus rich in sugars
(2) Warm and moist environment
(3) Presence of aerobic soil microbes
(4) Detritus richer in lignin and chitin

ES0530

209. According to Central Pollution Control Board [CPCB] what size (in diameter) of particulate is responsible for causing greater harm to human health ?
(1) 3.5 micrometers (2) 2.5 micrometers
(3) 4.0 micrometers (4) 3.0 micrometers

EI0531

210. Match the items in Column-I with those in Column-II :

Column I	Column II
(a) Herbivores-Plants	(i) Commensalism
(b) Mycorrhiza-Plants	(ii) Mutualism
(c) Sheep-Cattle	(iii) Predation
(d) Orchid-Tree	(iv) Competition

Select the correct option from following :
(1) (a)-(iv), (b)-(ii), (c)-(i), (d)-(iii)
(2) (a)-(iii), (b)-(ii), (c)-(iv), (d)-(i)
(3) (a)-(ii), (b)-(i), (c)-(iii), (d)-(iv)
(4) (a)-(i), (b)-(iii), (c)-(iv), (d)-(ii)

OP0532

211. According to Alexander von Humboldt :
(1) Species richness decreases with increasing area of exploration
(2) Species richness increases with increasing area, but only up to limit
(3) There is no relationship between species richness and area explored.
(4) Species richness goes on increasing with increasing area of exploration

BC0533

NEET(UG) 2021

212. Inspite of interspecific competition in nature, which mechanism the competing species might have evolved for their survival ?
(1) Resource partitioning
(2) Competitive release
(3) Mutualism
(4) Predation

OP0534

213. Amensalism can be represented as :
(1) Species A (–); Species B (0)
(2) Species A (+); Species B (+)
(3) Species A (–); Species B (–)
(4) Species A (+); Species B (0)

OP0535

214. The amount of nutrients, such as carbon, nitrogen, phosphorus and calcium present in the soil at any given time, is referred as :
(1) Climax (2)Climax community
(3) Standing state (4) Standing crop

ES0536

215. Which of the following statements is **not** correct ?
(1) Pyramid of biomass in sea is generally inverted.
(2) Pyramid of biomass in sea is generally upright.
(3) Pyramid of energy is always upright.
(4) Pyramid of numbers in a grassland ecosystem is upright.

ES0537

216. In the equation GPP–R = NPP
R represents :
(1) Radiant energy
(2) Retardation factor
(3) Environment factor
(4) Respiration losses

ES0538

217. Dobson units are used to measure thickness of:
(1) CFCs
(2) Stratosphere
(3) Ozone
(4) Troposphere

EI0539

218. Match **List - I** with **List - II.**

List-I		List-II	
(a)	Allen's Rule	(i)	Kangaroo rat
(b)	Physiological adaptation	(ii)	Desert lizard
(c)	Behavioural adaptation	(iii)	Marine fish at depth
(d)	Biochemical Adaptation	(iv)	Polar seal

Choose the **correct** answer from the options given below.

	(a)	**(b)**	**(c)**	**(d)**
(1)	(iv)	(ii)	(iii)	(i)
(2)	(iv)	(i)	(iii)	(ii)
(3)	(iv)	(i)	(ii)	(iii)
(4)	(iv)	(iii)	(ii)	(i)

ES0540

219. **Assertion (A) :**
A person goes to high altitude and experiences 'altitude sickness' with symptoms like breathing difficulty and heart palpitations.
Reason (R) :
Due to low atmospheric pressure at high altitude, the body does not get sufficient oxygen.
In the light of the above statements, choose the **correct** answer from the options given below.
(1) Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
(2) Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of (A)
(3) **(A)** is true but **(R)** is false
(4) **(A)** is false but **(R)** is true

ES0541

NEET(UG) 2021 (Paper-2)

220. Match the columns.

Column I	Column II
a. Arsenic	i. Minamata disease
b. Nitrate	ii. *Itai-itai*
c. Mercury	iii.Blue-baby syndrome
d. Cadmium	iv Skeletal fluorosis
e. Fluoride	v. Black foot disease

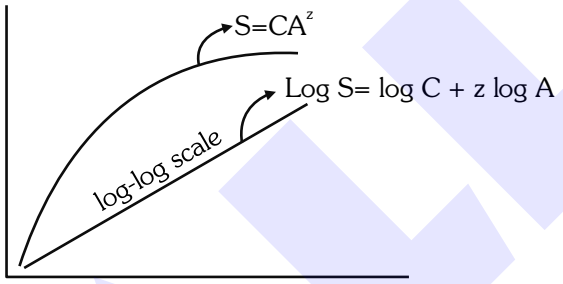
(1) a–v, b–iii, c–i, d–ii, e–iv
(2) a–ii, b–iii, c–v, d–i, e–iv
(3) a–iii, b–iv, c–v, d–i, e–ii
(4) a–v, b–iv, c–iii, d–ii, e–i

EI0542

221. Find the wrongly matched pair.
(1) *Clarias gariepinus* – African cat fish
(2) Himalaya – Hotspot
(3) Aravalli hills – Sacred groves
(4) Earth Summit – South Africa

BC0543

222. The following graph shows



(1) Plant–animal relationship
(2) Algae–fungi relationship
(3) Species–volume relationship
(4) Species-area relationship

BC0544

223. The Ganga Action Plan and Yamuna Action Plan has initiated to save these rivers from pollution by the efforts of
(1) The Ministry of Water Resources
(2) The Ministry of River Development
(3) The Ministry of Environment and Forests
(4) None of the above

EI0555

224. In 13 major cities, Bharat stage-IV emission norms have been in place since April 2010, and it has been enforced for entire country since
(1) April 2012 (2) April 2014
(3) April 2016 (4) April 2017

EI0546

225. Match the columns I and II, and choose the correct combination from the options given.

Column I	Column II
a. Pond	i.Man made ecosystem
b. Estuary	ii Closed ecosystem
c. Forest	iii.Aquatic ecosystem
d. Crop field	iv.Terrestrial ecosystem

(1) a–iii, b–ii, c–iv, d–i
(2) a–iv, b–i, c–ii, d–iii
(3) a–iii, b–iii, c–iv, d–i
(4) a–ii, b–iii, c–iv, d–i

ES0547

226. Loss of biodiversity in a region may lead to
(1) Decline in plant production
(2) Lowered resistance to drought
(3) Increased variability in disease cycles
(4) All of the above

BC0548

227. A plant receives 1000 J of energy from sun. The amount of energy will be present at the second trophic level is
(1) 1 J (2) 10 J
(3) 100 J (4) 0.1 J

ES0549

228. Which of the following is the most advanced stage during hydrarch succession?
(1) Reed-swamp stage
(2) Marsh-meadow stage
(3) Scrub stage
(4) Submerged plant stage

OP0550

NEET(UG) 2022

229. Habitat loss and fragmentation, over exploitation, alien species invasion and co-extinction are causes for:
(1) Competition
(2) Biodiversity loss
(3) Natality
(4) Population explosion

BC0551

230. The device which can remove particulate matter present in the exhaust from a thermal power plant is:
(1) Incinerator
(2) Electrostatic Precipitator
(3) Catalytic Convertor
(4) STP

EI0552

231. Which one of the following statements cannot be connected to Predation ?
(1) It might lead to extinction of a species
(2) Both the interacting species are negatively impacted
(3) It is necessitated by nature to maintain the ecological balance
(4) It helps in maintaining species diversity in a community

OP0553

232. Which of the following is **not** a method of *ex situ* conservation ?
(1) National Parks
(2) Micropropagation
(3) Cryopreservation
(4) *In vitro* fertilization

BC0554

233. Given below are two statements:

Statement I:
Decomposition is a process in which the detritus is degraded into simpler substances by microbes.

Statement II:
Decomposition is faster if the detritus is rich in lignin and chitin

In the light of the above statements, choose the **correct answer** from the options given below:
(1) Both **Statement I** and **Statement II** are incorrect
(2) **Statement I** is correct but **Statement II** is incorrect
(3) **Statement I** is incorrect but **Statement II** is correct
(4) Both **Statement I** and **Statement II** are correct

ES0555

234. The entire fleet of buses in Delhi were converted to CNG from diesel. In reference to this, which one of the following statements is **false** ?
(1) The same diesel engine is used in CNG buses making the cost of conversion low
(2) It is cheaper than diesel
(3) It can not be adulterated like diesel
(4) CNG burns more efficiently than diesel

EI0556

235. Which one of the following will accelerate phosphorus cycle ?
(1) Volcanic activity
(2) Weathering of rocks
(3) Rain fall and storms
(4) Burning of fossil fuels

ES0557

236. While explaining interspecific interaction of population, (+) sign is assigned for beneficial interaction, (–) sign is assigned for detrimental interaction and (0) for neutral interaction. Which of the following interactions can be assigned (+) for one species and (–) for another species involved in the interaction ?

(1) Amensalism (2) Commensalism
(3) Competition (4) Predation

OP0558

237. Detritivores breakdown detritus into smaller particles. This process is called :

(1) Fragmentation (2) Humification
(3) Decomposition (4) Catabolism

ES0559

238. *In-situ* conservation refers to:

(1) Conserve only high risk species
(2) Conserve only endangered species
(3) Conserve only extinct species
(4) Protect and conserve the whole ecosystem

BC0560

239. Given below are two statements:

Statement I:
In a scrubber the exhaust from the thermal plant is passed through the electric wires to charge the dust particles.

Statement II:
Particulate matter (PM 2.5) can not be removed by scrubber but can be removed by an electrostatic precipitator.

In the light of the above statements, choose the **most appropriate** answer from the options given below:

(1) Both **Statement I** and **Statement II** are incorrect
(2) **Statement I** is correct but **Statement II** is incorrect
(3) **Statement I** is incorrect but **Statement II** is correct
(4) Both **Statement I** and **Statement II** are correct

EI0561

NEET(UG) 2022 (OVERSEAS)

240. High dose of UV-B causes inflammation of cornea and is called as :

(1) Colour-blindness
(2) Evening-blindness
(3) Snow-blindness
(4) UV-blindness

EI0562

241. Which of the following come under the "Evil Quartet"?

(a) Habitat loss and fragmentation
(b) Over-exploitation
(c) Alien species invasion
(d) Mortality
(e) Competition

Choose the **correct** answer from the options given below :

(1) (b), (c) and (d) (2) (a), (b) and (c)
(3) (a), (b) and (d) (4) (a), (c) and (d)

BC0563

242. Identify the correct set of statements with regard to properties of humus.

(a) Highly resistant to microbial action.
(b) Dark coloured amorphous substance.
(c) End product of detritus food chain.
(d) Reservoir of nutrients.
(e) Undergoes decomposition very fast.

Choose the correct answer from the options given below :

(1) (a), (b) and (e) only
(2) (a) and (b) only
(3) (a), (b) and (c) only
(4) (a), (b) and (d) only

ES0564

243. Species Area relationship is described by the following equation.

$$\log S = \log C + Z \log A$$

where Z is :

(1) Species richness

(2) Slope of the line

(3) Y-intercept

(4) Area

BC0565

244. The thickness of the ozone in a column of air from the ground to the top of the atmosphere is measured in terms of :

(1) Swedberg units (2) Monomeric units

(3) Dobson units (4) Balton units

EI0566

245. Which of the following are **not** correct regarding decomposition of wastes?

(a) Low temperature inhibits decomposition.

(b) Warm and moist environment favours the process.

(c) The process is anaerobic.

(d) It is slower if detritus is rich in proteins and carbohydrates.

(e) Detritus is degraded into simpler inorganic substances by fungal and bacterial enzymes.

Choose the **correct** answer from the options given below :

(1) (c), (a) and (d) only

(2) (c) and (d) only

(3) (c), (d) and (e) only

(4) (b) and (c) only

ES0567

246. Endemism refers to :

(1) Species evenness

(2) Species confined to that region

(3) Species diversity

(4) Species richness

OP0568

247. Given below are two statements :

Statement-I : Pyramid of energy is always upright and is the most efficient.

Statement-II : Pyramid of biomass in sea is generally inverted.

In the light of the above statements, choose the **most appropriate** answer from the options given below :

(1) **Statement-I** is incorrect but **Statement-II** is correct

(2) Both **Statement-I** and **Statement-II** are correct

(3) Both **Statement-I** and **Statement-II** are incorrect

(4) **Statement-I** is correct but **Statement-II** is incorrect

ES0569

248. Which biological process leads to decrease in fish-eating bird population near a water body containing toxicants from industrial drainage?

(1) Biochemical oxygen demand

(2) Accelerated Eutrophication

(3) Biomagnification

(4) Algal bloom

EI0570

Re-NEET(UG) 2022

249. The pioneer species in a hydrarch succession are :

(1) Free-floating angiosperms

(2) Submerged rooted plants

(3) Phytoplanktons

(4) Filamentous algae

OP0571

250. Give the correct descending order of organisms with reference to their estimated number found in Amazon forest.

(a) Plants
(b) Invertebrates
(c) Fishes
(d) Mammals
(e) Birds

Choose the **correct answer** from the options given below :

(1) (a) > (b) > (e) > (d) > (c)
(2) (a) > (c) > (d) > (b) > (e)
(3) (b) > (a) > (e) > (d) > (c)
(4) (b) > (a) > (c) > (e) > (d)

BC0572

251. The species that come to appear in bare area are called :

(1) Pioneer species

(2) Invasive species

(3) Competitive species

(4) Species of seral community

OP0573

252. All successions irrespective of the habitat proceed to which type of climax community ?

(1) Xeric

(2) Mesic

(3) Hydrophytic

(4) Edaphic

OP0574

253. The World Summit on sustainable development held in 2002 in Johannesburg, South Africa pledged for:

(1) A significant reduction in the current rate of biodiversity loss.
(2) Declaration of more biodiversity hotspots.
(3) Increase in agricultural production
(4) Collection and preservation of seeds of different genetic strains of commercially important plants.

BC0575

254. Match **List-I** with **List-II** :

List-I	**List-II**
(a) Sacred groves	(i) Alien species
(b) Zoological park	(ii) Release of large quantity of oxygen
(c) Nile perch	(iii) *Ex-situ* conservation
(d) Amazon forest	(iv) Khasi Hills in Meghalaya

Choose the **correct answer** from the options given below :

(1) (a) - (iv), (b) - (iii), (c) - (i), (d) - (ii)
(2) (a) - (ii), (b) - (iv), (c) - (i), (d) - (iii)
(3) (a) - (iv), (b) - (i), (c) - (ii), (d) - (iii)
(4) (a) - (iv), (b) - (iii), (c) - (ii), (d) - (i)

BC0576

255. Frugivorous birds are found in large numbers in tropical forests mainly because of :

(1) lack of niche specialisation
(2) higher annual rainfall
(3) availability of fruits throughout the year
(4) temperature conducive for their breeding

BC0577

256. Match the **List-I** with **List-II** :

List-I	List-II
(a) Carbon dissolved in oceans	(i) 55 billion tons
(b) Annual fixation of carbon through photosynthesis	(ii) 71%
(c) PAR captured by plants	(iii) 4×10^3 kg
(d) Productivity of oceans	(iv) 2 to 10%

Choose the **correct answer** from the options given below :

(1) (a) - (ii), (b) - (iv), (c) - (iii), (d) - (i)

(2) (a) - (iii), (b) - (iv), (c) - (ii), (d) - (i)

(3) (a) - (ii), (b) - (iii), (c) - (iv), (d) - (i)

(4) (a) - (iii), (b) - (ii), (c) - (i), (d) - (iv)

* Annual fixation of carbon through photosynthesis is 4×10^{13} kg however given data is 4×10^3 kg which is wrong but most appropriate answer is 3.

ES0578

257. Two butterfly species are competing for the same nectar of a flower in a garden. To survive and coexist together, they may avoid competition in the same garden by:

(1) feeding at the same time

(2) choosing different foraging patterns

(3) increasing time spent on attacking each other

(4) predating on each other

OP00579

258. The amount of biomass or organic matter produced per unit area over a time period by plants during photosynthesis is called:

(1) Secondary production

(2) Primary production

(3) Gross primary production

(4) Net primary production

ES0580

259. Western Ghats have a large number of plants and animal species that are not found any where else. Which of the following term is used to notify such species?

(1) Threatened species

(2) Keystone species

(3) Endemic species

(4) Vulnerable species

BC0581

260. Why CNG is considered better fuel than diesel?

(a) It can not be adulterated

(b) It takes less time to fill the fuel tank

(c) It burns more efficiently

(d) It is cheaper

(e) It is less inflammable.

Choose the **most appropriate answer** from the options given below

(1) (a), (b), (c), (e) only

(2) (a), (c), (d) only

(3) (a), (b), (d), (e) only

(4) (c), (d), (e) only

EI0582

EXERCISE-II (Previous Year Questions) ANSWER KEY

Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	**2**	**4**	**4**	**1**	**2**	**3**	**1**	**4**	**4**	**3**	**2**	**2**	**2**	**4**	**4**
Que.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Ans.	**3**	**3**	**3**	**1**	**3**	**2**	**1**	**3**	**1**	**1**	**3**	**3**	**3**	**1**	**3**
Que.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Ans.	**2**	**3**	**3**	**3**	**1**	**2**	**3**	**4**	**2**	**2**	**3**	**1**	**2**	**1**	**2**
Que.	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Ans.	**3**	**1**	**1**	**2**	**4**	**2**	**2**	**3**	**1**	**2**	**3**	**4**	**4**	**4**	**2**
Que.	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Ans.	**3**	**2**	**2**	**3**	**3**	**3**	**2**	**2**	**2**	**3**	**4**	**1**	**3**	**2**	**2**
Que.	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Ans.	**2**	**4**	**4**	**4**	**3**	**3**	**1**	**3**	**3**	**2**	**3**	**4**	**1**	**3**	**2**
Que.	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105
Ans.	**4**	**4**	**4**	**2**	**4**	**2**	**4**	**3**	**2**	**4**	**2**	**2**	**4**	**3**	**3**
Que.	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
Ans.	**2**	**2**	**4**	**3**	**4**	**1**	**1**	**1**	**1**	**1**	**4**	**3**	**4**	**1**	**3**
Que.	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135
Ans.	**1**	**1**	**1**	**1**	**3**	**2**	**2**	**4**	**1**	**2**	**2**	**2**	**2**	**3**	**3**
Que.	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150
Ans.	**1**	**2**	**3**	**2**	**3**	**2**	**1**	**4**	**1**	**4**	**3**	**1**	**1**	**4**	**2**
Que.	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165
Ans.	**2**	**4**	**4**	**2**	**4**	**1**	**2**	**3**	**2**	**4**	**2**	**3**	**4**	**2**	**3**
Que.	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
Ans.	**3**	**1**	**2**	**2**	**2**	**4**	**4**	**1**	**3**	**2**	**2**	**3**	**4**	**2**	**3**
Que.	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195
Ans.	**4**	**4**	**1**	**3**	**2**	**4**	**1**	**3**	**4**	**1**	**3**	**4**	**4**	**4**	**4**
Que.	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210
Ans.	**1**	**2**	**3**	**3**	**1**	**1**	**3**	**2**	**2**	**2**	**3**	**3**	**4**	**2**	**2**
Que.	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225
Ans.	**2**	**1**	**1**	**3**	**2**	**4**	**3**	**3**	**1**	1	4	4	3	4	4
Que.	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240
Ans.	**4**	**1**	**3**	**2**	**2**	**2**	**1**	**2**	**1**	**2**	**4**	**1**	**4**	**3**	**3**
Que.	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255
Ans.	**2**	**4**	**2**	**3**	**2**	**2**	**2**	**3**	**3**	**4**	**1**	**2**	**1**	**1**	**3**
Que.	256	257	258	259	260										
Ans.	**3**	**2**	**2**	**3**	**2**										

Hint : Q. 162

$N_t = N_0 e^{rt} = 100 \times 2.72^{0.5 \times 6} = 100 \times 2.72^3 = 2012$

EXERCISE-III(A) (NCERT BASED QUESTIONS)

1. Select the statement which explains best parastism :-
(1) One organism is benefited
(2) Both the organism are benefited
(3) One organism is benefited, other is not affected
(4) One organism is benefited, other is affected

OP0355

2. The role of an organism in the ecological system is known as
(1) Habitate (2) Herbivory
(3) Niche (4) Interaction

OP0356

3. Adaptation to low temperature and freezing in animals occurs due to the production of :-
(1) Antifreeze proteins
(2) Chaperonins
(3) Proline
(4) Analine

ES0357

4. Select the statement which best explains commensalism :-
(1) One organism is benefited
(2) Both the organisms are benefited
(3) One organism is benefitted, other is not affected
(4) One organism is benefitted, other is affected.

OP0358

5. Community is defined as aggregation of :-
(1) Individuals of the same kind
(2) Individuals of same species
(3) Individuals of a population
(4) Populations of different species.

OP0359

6. Parasite can be explained as an organism which depends on others :-
(1) For food
(2) For shetter
(3) For both food and shetter
(4) For Reproduction

OP0360

7. An orchid plant growing on the branch of mango tree, what is the interaction between orchid & mango ?
(1) Parasitism
(2) Commensalism
(3) Protocoperation
(4) Mutualism

OP0361

8. Mark the important defence mechanism in plants against herbivory :-
(1) Spines
(2) Toxic Chemical
(3) Both 1 & 2
(4) None of these

OP0362

9. Species A (–) & Species B(o) shows the following Interaction :-
(1) Amensalism
(2) Predation
(3) Mutulism
(4) Competition

OP0363

ECOSYSTEM

10. Which one of the following has the largest population in a food chain ?
(1) Producers
(2) Primary consumers
(3) Secondary consumers
(4) Decomposers

ES0364

11. The second trophic level in a lake is :-
(1) Phytoplankons (2) Zooplanktons
(3) Benthos (4) Fishes

ES0365

12. Secondary producers are :-
(1) Herbivores
(2) Producers
(3) Carnivores
(4) None of the above

ES0366

13. What is the percentage of photosynthetically active radiation (PAR) in the incident solar radiations ?
(1) 100 % (2) 50 %
(3) 1–5 % (4) 2 – 10 %

ES0367

14. Which of the following is an abiotic components of the ecosystem ?
(1) Bacteria (2) Humus
(3) Plants (4) Fungi
ES0368

15. Which of the following processes helps in Nutrient conservation ?
(1) Mineralisation (2) Immobilisation
(3) Leaching (4) Nitrification
ES0369

16. Which of the following represents the sedimentary type of nutrient cycle ?
(1) Sulphur (2) Phosphorus
(3) Nitrogen (4) Oxigen
ES0370

17. Match the items in column I with column II

Column I	Column II
(i) Tropical Rain forest	(a) Shorea robusta
(ii) Tropical deciduous forest	(b) Quercus
(iii) Temperate broad - leaf forest	(c) Cedrus deodara
(iv) Temperate needle- leaf forest	(d) Diptero carpus

(1) (i) - d, (ii) - a, (iii) - c, (iv) - b
(2) (i) - d, (ii) - a, (iii) - b, (iv) - c
(3) (i) - a, (ii) - b, (iii) - c, (iv) - d
(4) (i) - b, (ii) - c, (iii) - a, (iv) - d
ES0371

BIODIVERSITY

18. Soil erosion can be prevented by :-
(1) Overgrazing
(2) Removal of vegetation
(3) Afforestation
(4) Deforestation
ES0372

19. Mild grazing in grassland by herbivores :-
(1) Retards growth of grasses
(2) Arrest growth of grasses
(3) Stimulatis growth of grasses
(4) Destroy Vegetation
ES0373

20. Deforestation generally decreases :-
(1) Rain fall (2) Soil erosion
(3) Drought (4) Global warming
ES0374

21. Forest area in india is about :-
(1) 9 % of geographical area
(2) 19% of geographical area
(3) 29% of geographical area
(4) 37% of geographical area
ES0375

22. Which one of the following represents a renewable source of energy ?
(1) Petroleum (2) Coal
(3) Nuclear fuel (4) Trees
BC0376

23. Which of the following represents the regulative function of forest ?
(1) Storage and release of gases
(2) Production of wood
(3) Production of essential oils
(4) Erosion of soil
EI0377

24. In India, per capita forest area is :-
(1) 0.06 ha (2) 0.60 ha
(3) 1.0 ha (4) 1.6 ha
EI0378

25. Extensive planting of trees to increase forest cover is called
(1) Afforestation (2) Agroforestry
(3) Deforestation (4) Social forestry
EI0379

26. Wetlands occupy :-
(1) 6 % of world's land
(2) 10% of world's land
(3) 12% of world's land
(4) 14 % of world's land
EI0380

27. The earth summit held at Rio de Janeiro in 1992 resulted in to :-
(1) Compilation of Red list
(2) Establishment of Biosphere Reserves
(3) Convention of Biodiversity
(4) IUCN
BC0381

ENVIRONMENTAL ISSUES

28. The ultraviolet radiations in the stratosphere are absorbed by :
(1) Oxygen (2) Ozone
(3) Sulphur dioxide (4) Argon
EI0382

29. What is used for removing particulate matter :-
(1) Catalytic converter
(2) Water stream
(3) Electrostatic precipitator
(4) All the above

EI0383

30. Select the colloidal material in domestic sewage :
(1) Sand, Silt and Clay
(2) Fecal matter, Bacteria, cloth and paper fibres.
(3) Nitrate, ammonia, phosphate
(4) Garbadge

EI0384

31. The world's most problematic Aquatic weed is :-
(1) Water hyacinth
(2) Parthanium grass
(3) Cactus
(4) Calotropis

EI0385

32. Natural aging of a lake by biological enrichment of its water called :-
(1) Biomagnification
(2) Eutrophication
(3) FOAM
(4) None of these

EI0386

33. A fine powder of recycled modified plastic, called :-
(1) Bitumen (2) e-waste
(3) Polyblend (4) Plastic waste

EI0387

34. Gases that are commonly known as green house gases :-
(1) CO_2 and methane (2) CO_2 and CFC
(3) N_2O, CFC (4) N_2O methane

EI0388

35. Increase in concentration of the toxicant at successive trophic levels, cause :-
(1) Biomagnification
(2) Eutrophication
(3) Accelerated Eutrophication
(4) Algal Bloom

EI0389

36. Catalytic converters are fitted in to automobiles for reducing emission of poisonous gases, having expensive metals namely :-
(1) Platinum
(2) Palladium
(3) Rhodium
(4) All the above

EI0390

EXERCISE-III(B) (ANALYTICAL QUESTIONS)

37. If CO_2 is absent in atmosphere of earth then :-
(1) Temperature will decrease
(2) Temperature will increase
(3) Plants will flourish well
(4) No effect

EI0391

38. ***Acacia***, ***Prosopis*** and ***Caparis*** belongs to :-
(1) Deciduous forest
(2) Tropical forest
(3) Thorn forest
(4) Evergeen forest

ES0392

39. CO is harmfull because :-
(1) It forms stable compound with haemoglobin
(2) It blocks mitosis
(3) It is mutagenic
(4) It causes defoliation

EI0393

40. Total amount of energy trapped by green plants in food is called :-
(1) Gross primary production
(2) Net primary production
(3) Standing crop
(4) Standing state

ES0394

41. Bacteria are essential in carbon cycle as :-
(1) Decomposer
(2) Synthesizer
(3) Consumer
(4) Pri. Producer

ES0395

42. Reason for elimination of wild life is :-
(1) Deforestation (2) Forest fire
(3) Floods (4) Less Rain fall

BC0396

43. Beside CH_4 and CO_2 other green house gas from agriculture area :-
(1) SO_2 (2) NH_3
(3) NO_2 (4) CFC

EI0397

44. In which biome a new plant may adapt soon:-
(1) Tropical rain forest
(2) Desert
(3) Mangrove
(4) Sea island

ES0398

45. Temperature variation in Pacific ocean in present time is called :-
(1) Cyclone effect
(2) Elnino effect
(3) Green house effect
(4)Gaudikov's effect

EI0399

46. Sewage purification is performed by :-
(1) Microbes (2) Fertilisers
(3) Antibiotics (4) Antiseptics

EI0400

47. Best economic method to harvest the solar energy:-
(1) Solar cell
(2) Energy plantation
(3) Cultivation of sugar cane then energy obtain by burning it.
(4) Solar cooker.

BC0401

48. Main reason of disturbance of biological diversity:-
(1) Green house effect
(2) Hunting
(3) Soil erosion
(4) Destruction of natural habitats

BC0402

49. Best method to preserve the wild relatives of plants:-
(1) By growing them in natural habitats
(2) Gene library
(3) By storing seeds
(4) Cryopreservation

BC0403

50. Bhopal gas tragedy is related with :-
(1) Methane
(2) Carban mono oxide
(3) Methyl Iso cyanate (MIC)
(4) SO_2

EI0404

51. Concentration of DDT is highest in :-
(1) Primary consumer
(2) Producers
(3) Top consumer
(4) Decomposers

ES0405

52. Percentage energy transferred to higher trophic level in food chain is :-
(1) 1% (2) 10% (3) 90% (4) 100%

ES0406

53. Lichens can be used as :-
(1) Bio-indicator for air pollution
(2) Initial vegetation for waste lands.
(3) Source of wood.
(4) To check the air pollution.

OP0407

54. Biotic and abiotic components form :-
(1) Community
(2) Ecosystem
(3) Population
(4) Species

ES0408

55. The plant having the largest flower is :-
(1) Total stem parasite
(2) Epiphyte
(3) Total root parasite
(4) Partial stem parasite

OP0409

56. What is phytotron :-
(1) A device to grow the plants in controlled environment
(2) Growing plants in green house.
(3) Radition chamber to induce the mutations
(4) Apparatus to study the effect of light on plants.

EI0410

57. Species diversity is maximum in :-
(1) Tropical rain forest.
(2) Temperate forest.
(3) Deserts
(4) Hill slops

ES0411

58. Which of the following is secondary pollutant
(1) PAN (2) CO
(3) NO_2 (4) SO_2

EI0412

59. According to forestry comission report-1997 the total forest cover of India :-
(1) 11% (2) 19.5%
(3) 17% (4) 18.7%

EI0413

60. Insectivorous plants grow in the soil which is deficient in :-
(1) Mg (2) Ca (3) P (4) N

ES0414

61. Maximum DDT in birds feeding on :-
(1) Fishes (2) Meat
(3) Insects (4) Seeds

EI0415

62. Which one is associated with occupational hazard is:-
(1) Fluorosis
(2) Pneumoconiosis
(3) Silicosis
(4) Asthama

EI0416

63. Which one of the following is correct matching of a plant, its habit and the forest type where
it normally occurs ?
(1) ***Prosopis***, tree, scrub
(2) ***Saccharum***, grass, forest
(3) ***Shorea robusta***, herb, tropical rain forest
(4) ***Acacia catechu***, tree, coniferous forest

ES0469

64. Green house effect is :-
(1) Gardening outside the house
(2) Global cooling.
(3) Global warming.
(4) Green colour house

EI0418

65. What will happen if the number of organism increased at a place:-
(1) Inter species competition
(2) Intra species competition
(3) Both
(4) None

OP0419

66. Which is the reason for highest biomass in aquatic ecosystem-
(1) Nano plankton, blue green algae, green algae
(2) Sea grass, and slime molds
(3) Benthonic and brown algae
(4) Diatoms

ES0420

67. Pneumatophores are found in-
(1) The vegetation which is found in marshy and saline lake
(2) The vegetation which found in acidic soil
(3) Xerophytes
(4) Epiphytes

ES0421

68. What shall be the effect of destruction of wild life :–
(1) Wild gene of disease resistance will not be obtained
(2) Soil erosion
(3) Floods
(4) Green house effect

BC0422

69. In which of the following plant sunken stomata are found :-
(1) *Nerium* (2) Hydrilla
(3) Mango (4) Guava

ES0423

70. Which of the following is absent in polluted water:
(1) Hydrilla (2) Water hyacinth
(3) Larva of stone fly (4) Blue green algae

BC0424

71. Exploring molecular, genetic and species level diversity for products of economic importance is called
(1) Biodiversity (2) Biopiracy
(3) Bioprospecting (4) Bioremediation

OP0425

72. Two different species can not live for long duration in the same niche or habitat. This law is:
(1) Allen's law
(2) Bergman's rule
(3) Competitive exclusion principal
(4) Weiseman's theory

OP0426

73. Which of the following is a correct pair :
(1) Cuscuta - parasite
(2) Dischidia - insectivorous
(3) Opuntia - predator
(4) Capsella - hydrophyte

OP0427

74. What is a keystone species ?
(1) A common species that has plenty of biomass, yet has a fairly low impact on the community's organization
(2) A rare species that has minimal impact on the biomass and on other species in the community
(3) A dominant species that constitutes a large proportion of the biomass and which affects many other species
(4) A species which makes up only a small proportion of the total biomass of a community, yet has a huge impact on the community's organization and survival

EI0428

75. Lead concentration in blood is considered alarming if it is –
(1) 30μg/100 ml
(2) 4-6μg/100 ml
(3) 10μg/100 ml
(4) 20μg/100 ml

OP0429

76. Lichens are well known combinaton of an alga and a fungus where fungus has :
(1) An epiphytic relationship with the alga
(2) A parasitic relationship with the alga
(3) A symbiotic relationship with the alga
(4) A saprophytic relationship with the alga

ES0430

77. Which of the following is expected to have the highest value (gm/m^2/yr) in a grassland ecosystem :-
(1) Tertiary production
(2) Gross production (GP)
(3) Net production (NP)
(4) Secondary production

BC0431

78. In your opinion, which is the most effective way to conserve the plant diversity of an area :-
(1) By creating biosphere reserve
(2) By creating botanical garden
(3) By developing seed bank
(4) By tissue culture method

EI0432

79. In 1984, the Bhopal gas tragedy took place because methyl isocyanate :-
(1) Reacted with ammonia
(2) Reacted with CO_2
(3) Reacted with water
(4) Reacted with DDT

ES0433

80. An ecosystem which can be easily damaged but can recover after some time if damaging effect stops will having :-
(1) High stability and low resilience
(2) Low stability and low resilience
(3) High stability and high resilience
(4) Low stability and high resilience

ES0434

81. In which one of the following habitats does the diurnal temperature of soil surface vary most ?
(1) Forest (2) Desert
(3) Grassland (4) Shrub land

ES0435

82. Photosynthetically active radiation (PAR) represents the following range of wave length.
(1) 400 – 700 nm
(2) 500 – 600 nm
(3) 450 – 950 nm
(4) 340 – 450 nm

EI0436

83. Blood analysis of a patient reveals an unusually high quantity of carboxyhaemoglobin content. Which of the following conclusions is most likely to be correct? The patient has been inhaling polluted air containing unusually high content of
(1) Carbon monoxide
(2) Carbon disulphide
(3) Chloroform
(4) Carbon dioxide

EI0437

84. In your opinion, which is the most effective way to conserve the plant diversity of an area ?
(1) By developing seed bank
(2) By tissue culture method
(3) By creating biosphere reserve
(4) By creating botanical garden

EI0438

85. Common indicator organism of water pollution is
(1) *Entamoeba histolytica*
(2) *Lemna paucicostata*
(3) *Eichhornia crassipes*
(4) *Escherichia coli*

EI0439

86. Which one of the following pairs is mismatched –
(1) Nuclear power – radioactive wastes
(2) Solar energy – greenhouse effect
(3) Fossil fuel burning– release of CO_2
(4) Biomass burning – release of CO_2

BC0440

87. Identify the correctly matched pair –
(1) Kyoto Protocol – Climatic change
(2) Montreal Protocol – Global warming
(3) Basal Convention – Biodiversity Conservation
(4) Ramsar Convention – Ground water pollution

ES0441

88. Biodiversity Act of India was passed by the Parliament in the year –
(1) 2002 (2) 1992
(3) 1996 (4) 2000

ES0442

89. More than 70% of world's fresh water is contained in –
(1) Antarctica
(2) Polar ice
(3) Glaciers and Mountains
(4) Greenland

BC0443

90. Which one of the following pairs mismatched –
(1) Savanna– acacia trees
(2) Coniferous forest – evergreen trees
(3) Tundra–permafrost
(4) Prairies–epiphytes

BC0444

91. At which latitude, heat gain through insolation approximately equals heat loss through terrestrial radiation –
(1) 42½ ° North and South
(2) 22½ ° North and South
(3) 40° North and South
(4) 66° North and South

EI0445

92. According to IUCN Red List, what is the status of Red Panda (***Ailurus fulgens***) ?
(1) Critically endangered species
(2) Vulnerable species
(3) Extinct species
(4) Endangered species

EI0446

93. Prolonged liberal irrigation of agricultural fields is likely to create the problem of :
(1) Acidity
(2) Aridity
(3) Salinity
(4) Metal toxicity

OP0447

94. Which of the following is **not** used for disinfection of drinking water :
(1) Chlorine
(2) Ozone
(3) Chloramine
(4) Phenyl

BC0448

95. Which of the following is **not** true for a species ?
(1) Members of a species can interbreed
(2) Gene flow does not occur between the populations of a species
(3) Each species is reproductively isolated from every other species
(4) Variations occur among members of a species

ES0449

96. One of the most important functions of botanical gardens is that :
(1) they provide a beautiful area for recreation.
(2) one can observe tropical plants there.
(3) they allow ***ex-situ*** conservation of germ plasm
(4) they provide the natural habitat for wild life.

EI0450

97. Mr. X is eating curd/yoghurt. For this food intake in a food chain he should be considered as occupying
(1) First trophic level
(2) Second trophic level
(3) Third trophic level
(4) Fourth trophic level

EI0451

98. July 11 is observed as :-
(1) World Population Day
(2) No Tobacco Day
(3) World Environment Day
(4) World Health Day

OP0452

99. Biological Oxygen Demand (BOD) is a measure of
(1) Industrial wastes poured into water bodies
(2) Extent to which water is polluted with organic compounds
(3) Amount of carbon monooxide inseparably combined with haemoglobin
(4) Amount of oxygen needed by green plants during night

EI0453

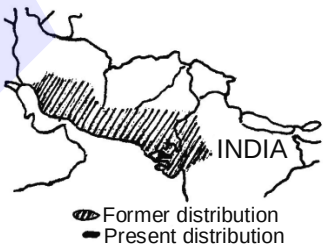
100. Which one of the following is a matching pair of certain organism(s) and the kind of association
(1) Shark and sucker fish-proto cooperation
(2) Algae and fungi in lichens-mutualism
(3) Orchids growing on trees-parasitism
(4) ***Cuscuta*** (dodder) growing on other flowering plants-epiphytism

BC0454

101. In almost all Indian metropolitan cities like Delhi, the major atmospheric pollulant(s) is/are
(1) Suspended particulate matter (SPM)
(2) Oxides of sulphur
(3) Carbon dioxide and carbon monoxide
(4) Oxides of nitrogen

ES0455

102. The map given below indicates the former and the present distribution of an animal. Which animal could it be :–



(1) Wild ass. (2) Nilgai
(3) Black buck (4) Lion

BC0456

103. The Great Barrier Reef along the east coast of Australia can be categorized as
(1) Population
(2) Community
(3) Ecosystem
(4) Biome

BC0457

104. Which one of the following is a pair of endangered species
(1) Garden lizard and Mexican poppy
(2) Rhesus monkey and Sal tree
(3) Indian peacock and carrot grass
(4) Hornbill and Indian Aconite.

BC0458

105. If the Bengal Tiger becomes extinct
(1) Hyenas and wolves will become scarce
(2) The wild areas will be safe for man and domestic animals
(3) Its gene pool will be lost for ever
(4) The populations of beautiful animals like deers will get stabilized.

BC0459

106. Nitrogen oxides produced from the emission of automobiles and power plants, are the source of fine air borne particles which lead to
(1) Photochemical smog
(2) Dry acid deposition
(3) Industrial smog
(4) Wet acid deposition

EI0460

107. A lake with an inflow of domestic sewage rich in organic waste may result in
(1) Drying of the lake very soon due to algal bloom
(2) An increased production of fish due to lot of nutrients
(3) Death of fish due to lack of oxygen
(4) Increased population of aquatic food web organisms

EI0461

108. Minamata disease was caused due to the consumption of
(1) Sea food containing lot of cadmium
(2) Fish contaminated with mercury.
(3) Oysters with lot of pesticide
(4) Sea food contaminated with selenium

EI0462

109. If high altitude birds become rare or extinct, the plants which may disappear along with them are:
(1) Pine
(2) Oak
(3) Orchids
(4) Rhododendrons

BC0463

110. Which one of the following pairs of geographical areas show maximum biodiversity in our country:-
(1) Sunderbans and Rann of Kutch
(2) Eastern Ghats and West Bengal
(3) Eastern Himalaya and Western Ghats
(4) Kerala and Punjab

BC0464

111. One of the **ex situ** conservation methods for endangered species is :-
(1) Wildlife Sanctuaries
(2) Biosphere Reserves
(3) Cryopreservation
(4) National Parks

BC0465

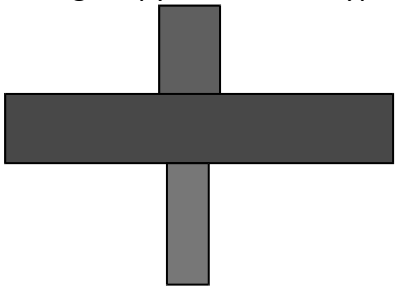
112. Which one of the following statements pertaining to pollutants is **correct** :-
(1) DDT is a non-biodegradable pollutant
(2) Excess fluoride in drinking water causes osteoporosis
(3) Excess cadmium in drinking water causes black foot disease
(4) Methylmercury in water may cause "Itai Itai" disease

EI0466

113. Which one of the following correctly represents an organism and its ecological niche ?
(1) ***Vallisneria*** and pond
(2) Desert locust ***(Schistocerca)*** and desert
(3) Plant lice (aphids) and leaf
(4) Vultures and dense forest

OP0467

114. Given below is one of the types of ecological pyramids. This type represents



(1) Pyramid of numbers in a grassland
(2) Pyramid of biomass in a fallow land
(3) Pyramid of biomass in a lake
(4) Energy pyramid in a spring

ES0468

EXERCISE-III ANSWER KEY

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