

Chapter-14 Ecosystem

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(Adopted for educational social service purpose only).

NEET Biology MCQ Chapter-14. Ecosystem

1. What does following diagram indicate ?

- Post reproductive age group
- reproductive age group
- the reproductive age group

(A) Declining Population

(B) Constant declining Population

(C) Increasing Population

(D) Stable Population

Ans:c

2. Which option is not correct for the given diagram ?

- post the productive age group.
- reproductive age group
- the reproductive age groupme

(A) It indicate decreasing population stable

(B) It indicate stable population

(C) The post-population age group people are more in number

(D) The death rate is higher than birth rate

Ans:b

3. A Snake feed on frog, the hawk feed on this snake. What is the place of snake in foodchain?

(A) producer

(B) primary consumer

(C) secondary consumer

(D) Tertiary consumer

Ans:c

4. What is correct for the given diagram?
- Post reproductive age group
  - reproductive age group
  - The reproductive age group
- (A) Pre- re productive group people are more in number  
(B) Post-re productive group people are more in number  
(C) Post-re productive group people are more or less  
(D) In it-pre productive and post reproductive age-group are placed respectively.

Ans:a

5. Orchid living on the tree is an example of .....
- (A) Parasitism      (B) Predation      (C) Commensalism      (D) Mutualism

Ans:c

6. Population of which of the following will be highest in the food chain?
- (A) Decomposer      (B) Primary Producer  
(C) Photosynthetic organism      (D) Secondary consumers

Ans:c

7. Who is food component of the grazing food chain?
- (A) Consumer  
(B) Decomposer  
(C) Photosynthetic living organism  
(D) Photosynthetic consumers

Ans:b

8. System resulting from interaction of all the known living factors and population of all the species of a unit area is...

- (A) Ecology      (B) Genetics  
(C) Science of plants and animal      (D) Ecosystem

Ans:d

9. In which of the following plants are included in any food chain?
- (A) Primary Producer      (B) Primary predator & producer  
(C) primary consumer      (D) Primary decomposer

Ans:a

10. Which of the following is the correct statement for food chain?  
(A) Every chain formed by nutritional relations, is used to understand energy flow.  
(B) Energy component of the food chain forms trophic level.  
(C) Inter-relation amongst different food chain forms food web.  
(D) All of the given  
Ans:d
11. Which of the following uses maximum energy?  
(A) Primary consumer (B) Secondary consumer  
(C) Decomposer (D) Primary Producers  
Ans:d
12. Through, which of the following, energy enters in an ecosystem?  
(A) Herbivores (B) Producer (C) Decomposer (D) Primary producers  
Ans:b
13. Why is algae placed in first place of food chain ?  
(A) Algae is first to synthesize food.  
(B) Algae is first to consume food.  
(C) Every living organism can utilize food.  
(D) None of the given.  
Ans:a
14. In which of the following wheat eating pigeons included ?  
(A) Decomposer (B) Primary consumer.  
(C) primary producers (D) secondary consumer.  
Ans:b
15. which of the following is placed in upper most (highest) level of ecological pyramids.  
(A) Herbivores (B) Carnivores  
(C) Primary and SecondaryProducers. (D) Primary and Secondary consumer.  
Ans:b

16. As we proceed in food chain, bio-mass.....  
(A) Remain Same  
(B) Decreases  
(C) Increases  
(D) Initially same and later keep decreasing.  
Ans:b

17. In ecosystem the source of energy is.... .  
(A) ATP (B) Sun (C) The Green plant (D) Sugar.  
Ans:c

18. Who is primary consumer of biotic community ?  
(A) Herbivores/ Grazing animal  
(B) Omnivores  
(C) Scavengers  
(D) Carnivores.  
Ans:a

19. In which of the following category weeds are placed ?  
(A) Primary producers  
(B) Secondary consumer.  
(C) Primary consumer.  
(D) Decomposer.  
Ans:a

20. When does the energy flow start in an ecosystem ?  
(A) When material cycle starts  
(B) When sun rises  
(C) When any living organism gain food.  
(D) When light energy is converted in chemical energy.  
Ans:b

21. Which of the following option is correct for storage place for phosphorus and nitrogen respectively ?

(A) Consumer

(B) Parental rock and environment

(C) Environment and producers

(D) Environment and parental rock

Ans:b

22. An individual "x" uses mushroom as food then in which trophic level mushroom and "x" are included?

MushroomX Food chain

(A) Secondary Primary Detritivorous food chain

(B) PrimarySecondary Detritivorous food chain

(C) PrimarySecondary Grazing food chain

(D) Secondary Primary Grazing food chain

Ans:b

23. Which of the following is trophic level of the orchid staying on mango tree ?

(A) First

(B) Tertiary/ Third

(C) Second

(D) Fourth

Ans:a

24. Which age group in pyramid indicate less reproductive potential ?

(A) Bell shaped

(C) Triangular

(B) Inverted Bell shaped

(D) All of them have equal(same) potential

Ans:b

25. It is correct for ecosystem .....

(A)( Plants, Animals, Microorganisms) + Abiotic environment

(B) Community formed by various species present in a particular region.

(C) Animal, plants and micro-organisms.

(D) Abiotic factors

Ans:a

26. What is the original source of energy for the living organisms ?  
(A) Carbohydrate (B) Sun light (C) ATP (D) Lipid

Ans:b

27. In which of the following curd eating people are included ?

- (A) Producer  
(B) First[1st ]  
(C) Tertory[3rd ]  
(D) Second[2nd]

Ans:a

28. The functional efficiency of ecosystem is effected when decomposers are removed from it, because..

- (A) Energy flow will stop  
(B) Rest components decomposition will become faster  
(C) Herbivores will not get sun light  
(D) Flow of nutrient will stop.

Ans:d

29. From which of the following detritus food chain will start?

- (A) Algae (B) Bacteria (C) Protozoa (D) Virus

Ans:b

30. Which of the following is gaseous cycle?

- (1) Sulphur cycle (2) Carbon cycle  
(3) Phosphorous cycle (4) Nitrogen cycle  
(A) 1,2 (B) 1,2 (C) 3,4 (D) 1,3,4

Ans:c

31. At Each trophic level, in which form energy is lost?

- (A) Heat (B) Chemical (C) Light (D) None

Ans:a

32. Which Source of eutrophication is the modern source of phosphorus ?

(A) Detergent (B) Fertilizer (C) Faecal of animal (D) Rivers

Ans:a

33. In soil, It helps in absorbtion of phosphorous ?

(A) Leaves (B) Mycorriza (C) Root (D) Stem

Ans:b

34. In a day, How many times an individual inspire and expire (breathing) ?

(A) 10,000 (B) 20,000 (C) 40,000 (D) 50,000

Ans:c

35. What percentage of total metabolic energy is produced through fermentation of lactic acid ?

(A) 80% (B) 70% (C) 100% (D) 40%

Ans:b

36. Which adaptation is observe only in xerophytes ?

(A) CAM (B) TCA (C) Hatch-Slack (D) C<sub>3</sub> cycle

Ans:a

37. Which of the following opteon is correct for CO<sub>2</sub> absorption in CAM ?

(A) During night (B) Only at midnight  
(C) During day time (D) Morning

Ans:a

38. It- (I) Liver Liver tubule

(II) kidney Urinary tubule

(III) Ecology X than What does "x" represent ?

(A) Biotic community (B) Ecosystem  
(C) Population (D) All of the given

Ans:b

39. What can be Explained through following chart?

Birds	25 ppm
Big fishes	2ppm
Small fishes	0.5ppm

Zoo Plankton	0.5ppm
Phyto planktons	0.04 ppm
DDT in water	0.003ppb

(i) Biological magnification concentration of DDT

(ii) Aquatic food web

(iii) Food chain

(iv) DDT is non degradable

(v) One aquatic ecosystem

(A) (i), (ii), (iii)

(B) (i), (iii), (iv)

(C) (ii), (iii), (iv)

(D) (iii), (iv), (v)

Ans:b

40. With reference to process of decomposition arrange the following in proper sequence.

(1) Dead material Predation by detritivore digestion in animals defecation mixes with soil.

(2) Mineralization and synthesis of fertilization of substances Extracellular

(3) Complex substance Tons & salts (simple sub.)enzymes

(4) Transport of soluble substances in the inner layer of soil

(A) 1,2,3,4

(b) 1,4,3,2

(c) 3,1,4,2

(d) 1,3,4,2

Ans:b

41. An element which is generally obtain from rocks. From the given information which is correct option for the same Present how sin Majorin soil water body Portion 5432 some portion432 0

(A) (1) dissolve in water, (2) deposited at the bottom of the sea, (3) used by forest

(4) eaten by fishes (5) eaten by sea birds

(B) (1) dissolve in water, (2) used by planktons, (3) Fishes, (4) Sea birds, (5) deposited at the bottom of the sea

(C) (1) Fishes (2) Sea birds (3) used by planktons (4) Sea bird (5) deposited at the bottom of the sea

(D) (1) Fishes (2) used by planktons (3) Fishes (4) Sea birds (5) None

Ans:b

42. Few statements are given below in reference with Thermodynamics, Which of the following option shows all correct statements for it ?

(I) Amount of energy is constant.

(II) During transfer of energy some amount of energy is converted in to heat.

(III) Free energy = energy which can do work.

(IV) At each trophic level amount of stored energy reduces.



- (A) (I) and(11)      (B) (III) and (IV)      (C) (I) and (IV)      (D) All of the given

Ans:d

43. Food chain always start with producer, which of the following is an exceptional to the given statement.

- (A) Rat      (C) Fox      (B) Lion      (D) Earth - worm

Ans:d

44. X is released in Halophytes and Y is source of it , Z process occurs in- estuary, then What does x,y,z indicate? X- Potassium Y - rocks Z- Biological magnification

- (A) X - DDT Y – Water  
(B) Y- Biological magnification  
(C) X-Phosphorus Y - Sewage water Z- Eutrophication  
(D)None of this.

Ans:c

45. If energy produced by producer is 1000 units, than What amount of energy will be found in highest level of consumer ?

- (A) 100      (B) 10      (C) 1      (D) 1000

Ans:c

47. What is incorrect for oxygen ?

- (A) Most of the metabolic energy is produced by it.  
(B) Plants are included in the organisms producing it.  
(C) It is essential for all the organisms  
(D) Its proportion in water is 90%.

Ans:c

48. X is source of y. but y never return to x, Than which option is wrong for x and y.

- (A) X = plant, Y= organic compound  
(B) X= sun, Y=Energy  
(C) a& b Both are correct.  
(D) A and B are Wrong.

Ans:d

49. What does pyramid of Biomass of an ecosystem indicate in...

- (A) Number of species in each trophic level
- (B) Number of organisms in each trophic level
- (C) Organization of tissue of each trophic level
- (D) All of the given.

Ans:c

50. Which option is correct for the given information ?

- (1) Ecosystem is an outcome of an interaction between all living components and non-living components of Environment.
- (2)  $GPP = NPP - \text{loss due to respiration}$
- (3) Primary productivity is measured in dry biomass.

(A) TET                      (B)FFT                      (C) FTF                      (D)TTF.

Ans:d

51. (A) x = Exchange Place y = Consumer z = Population  
(B) x = Exchange Place y = Population z = Micro Organism  
(C)x= Biotic Community y = Population z = Consumer  
(D) x = Exchange Place y = Biotic Community z = Consumer

Ans:d

52. What is responsible for change in the size of population of any particular area?

- (A) Availability of food.
- (B) Predation
- (C) Pressure
- (D) All three

Ans:d

53. In one forest maximum 500 lions can be allowed with than what does 500 indicate ?

- (A) Maximum birth rate
- (B) Population of lion
- (C) Carrying Capacity of Population
- (D) Related birth rate

Ans:c

54. At which vital index population is stable ?

(A) 1                      (B) 0                      (C) Infinite                      (D) 100

Ans:d

55. In any of the ecosystem man can be....

- (A) Primary Consumer
- (C) Secondary Consumer
- (B) Producer
- (D) a&c

Ans:d

56. If earth is considered a unit region then biosphere can be compared to.....

- (A) Eco-System
- (C) Population
- (B) Biotic Community
- (D) Species

Ans:b

57. If earth is considered a unit region then it can be compared to....

- (A) Eco-System
- (B) Population
- (C) Biotic Community
- (D) Species

Ans:a

58. Who accepts the nutrient released in environment by decomposer?

- (A) Consumers
- (B) Producers
- (C) Secondary Consumers
- (D) None of the given

Ans:b

59. If herbivores are "5" in number in the given food chain then, what will be the total number of trophic layers in it?

- (A) 7
- (B) 8
- (C) 5
- (D) can not be predicted

Ans:d

60. which organism provided useable phosphate from dead organisms?

- (A) Fungi, Bacteria
- (B) Fungi, Algae
- (C) Bacteria, Algae
- (D) Bacteria, Fungi

Ans:d

61. How many times do we breathe per day ?

- (A) 20,000
- (B) 40,000
- (C) 20,000
- (D) None of them

Ans:a

63. It is first step of the decomposition of organic compound.

- (A) Fragmentation - In body of Scavengers

(B) Catabolism - In body of decomposer

(C) Leaching - In soil

(D) Catabolism - In soil

Ans:a

64. Autotrophs use [X] and Produces [Y], which is store as [Z], which of the given option is correct for X, Y, and Z?

(A) Sunlight                      Nutrient                      Chemical

(B) Energy                      Chemical energy                      Sunlight

(C) Grass (Herb)                      Energy                      Starch

(D) Sunlight                      Glycogen                      ATP

Ans:a

65. What is an Original Source of energy flow in any food chain ?

(A) Sun                      (B) Produces                      (C) Primary                      (D) None

Ans:b

66. Immature fall of floral bud and fruits are observed in a farm, and on leaves Red and purple pigments spots are observed, in which of the following place is Such Symptoms will not be observed in plants

(A) Sea shore                      (B) Bank of river

(C) Foot hills of mountain                      (D) Red Soil

Ans:c

67. who is responsible for the process like, Phosphate Containing Organic compound Phosphate

(A) Certain fungi                      (B) Certain algae

(C) Certain Specific bacteria                      (D) All three

Ans:c

68. which of the following eco-system has highest annual primary productivity ?

(A) Tropical deciduous forest                      (B) Tropical Rain forest

(C) Temperate deciduous forest                      (D) Temperate Ever green forest.

Ans:b

69. Which of the following is not a functional unit of ecosystem ?

(A) Stratification (B) Flow of energy (C) Decompos (D) productivity.

Ans:a

70. Which of the following associations do not establish functional inter specific association ?

- (A) Mutualism
- (B) Exoparasite
- (C) Endoparasite
- (D) Commensalism

Ans:d

71. Which statement is correct ?

- (A) Plant uses CO<sub>2</sub> during respiration.
- (B) Biomass of the plant is available to only herbivores.
- (C) In all CO<sub>2</sub> acceptor plants, organic compounds are produce through photosynthesis.
- (D) All three.

Ans:c

72. It is the type of photosynthesis occurs in most of the plants ?

- (A) C<sub>4</sub> - Cycle
- (B) C<sub>3</sub> - Cycle
- (C) CAM - Cycle
- (D) C<sub>2</sub>-Cycle

Ans:b

73. In which of the following alimentary canal, " starch glucose" is produced ?

- (A) Producer (B) 1st trophic layer
- (C) 2nd trophic layer (D) All of types

Ans:b

74. Which is the correct options ?

Interspecific association

- (i) Reproductive
- (ii) Productive
- (iii) Nutritional

Examples

- (x) Producer Herbivores Carnivores.
- (y) Animals and dispersion of fruit seed.
- (z) Mimicry

(A) (i): Z

(B) (i): Z

(C) (i): Y

(D) (i):Y

- (ii):X                      (ii): Y                      (ii): Z                      (ii): X  
(iii): Y                      (iii): X                      (iii): X                      (iii) : Z  
Ans:c

75. In an ecosystem, Which of the following is unidirectional ?  
(A) Sulphur                      (B) Organic nutrient  
(C) carbon                      (D) Free energy

Ans:d

76. Who is first to receive Phosphate released through leaching in phosphate cycle ?  
(A) Decomposer                      (B) producer                      (C) Consumer                      (D) None of the given

Ans:b

77. Which of the following is not a pair of Gaseous cycle ?  
(A) P&N                      (B) N&S                      (C) N&S                      (D) C&P

Ans:c

78. What is indicated by Pyramid of number?  
(A) Number of individuals at every trophic layer.  
(B) Species belonging to a particular region  
(C) Number of member of biotic-community  
(D) None of the given.

Ans:a

79. Which of the following has maximum importance (value) in grass land.  
(A) Secondary Production                      (B) Net Production  
(C) Tertiary Production                      (D) Total Production.

Ans:d

80. Grass –cow- lion. If productivity of grass is 5000 kg/ Meter/ year. Then What will be the productivity of lion ? (In general)  
(A) 500  
(B) >50  
(C) 1000 kg / meter<sup>2</sup> / year.  
(D) >100

Ans:b

81. Select correct statements

- (i) If 90% of Carnivores are removed form forest, then forest area increases.
  - (ii) Generally 3 to 4 trophic layer are present in food chain due to loss of energy.
  - (iii) Food chain always possesses 2 to 8 trophic layers.
  - (iv) On removing 80% of tigers, member of herbivores will increase.
- (A) (ii), (iv)                      (B) (i), (ii)                      (C) (i), (iii)                      (D) (iii), (iv)

Ans:a

82. In which stage of the Decomposition, larger surface area for future decomposition is available?

- (A) 1<sup>st</sup>                      (B) 2<sup>nd</sup>                      (C) 3<sup>rd</sup>                      (D) All of the above

Ans:a

83. which option is Correct for the given statements x and y?

- X: fungi, showing low level of body organization produce with thick wall.  
 Y: On availability of favorable condition they produce sporophytic stage.

Ans:c

85. which of the given option is shows most stable ecosystem ?

Producer	primary Consumer	Secondary consumer	Tertiary consumer	total
(A) 100	200	150	80	530
(b) 900	500	225	40	1665
(c) 200	100	125	75	500

- (d) All of the given.

Ans:b

86. which of the following is one of the causes of cancer ?

- (A) Obesity                      (B) Artherosclerosis  
 (C) Inadequate of O<sub>2</sub> supply                      (D) Hypertension

Ans:c

87. which option is more suitable for x and y?

X : Animal cells possess mitochondria.

Y : In animal cell energy is released when carbohydrates are completely broken

- (A) Both are correct (B) Both are wrong  
(C) If x is correct then only y is correct. (D) X: correct Y: wrong energy

Ans:c

88. (X) (Y) from x energy is available to y and from y energy do not return to x then which option correct ?

- (A) The earth (B) The Sun (C) The Sun (D) All of given

Ans:b

89. The Sun The earth A biotic Select the correct option Substance Energy Energy?

- (A) Figure (B) Figure (C) Figure (D) Figure

Ans:c

90. Which of the following stage is possible by the activity of Heterotrophs ?

- (A) Utility (B) Re-accommodation (C) Decomposition (D) All the given

Ans:d

91. The herbaceous plant has 100 gram weight then what would be the average bio-mass of the same ?

- (A) 100 gram (B) 20-25 gram (C) 10-15 gram (D) 85-90 gram

Ans:c

92. In the given pyramid of energy which of the following can be placed in first trophic level ?

- (A) Decomposer (B) plants (C) a & b Both (D) None

Ans:c

93. X is structural unit of economy and y is structural unit of x then ... what is the x and the y?

- (a) Biotic community (b) Ecosystem (c) Biomass (d) Food web

Ans:b



94. X is maintained by man, but it is harmful to y, the x and y are (?)

(A) Natural eco-system - Man made ecosystem

(b) Man made ecosystem - Natural eco-system

(c) Any one from a & b

(d) None of these

Ans:b

95. X is included in environmental factors; y is included in edaphic (soil related) then the x & y is.... X

(A) Air Water

(B) Water Air

(C) Soil Light (D) Wind Air

Ans:d

96. In material cycle which of the following is last acceptor of material ?

(A) Producer

(C) Decomposer

(B) Consumer

(D) is not passing

Ans:d

97. Which one is the maximum suitable to from top of the energy pyramid ?

(A) Tertiary consumer

(B) Secondary consumer

(C) Producers

(D) None of this

Ans:a

98. Which of the following option is correct for the column I and II ?

Column - I

Column - II

(i) Decomposer

(P) Grass

(ii) Secondary carnivores

(Q) Herbivores

(iii) producer

(R) Frog

(iv) primary consumers

(S) Hawk

(v) primary carnivores

(A) (P-iii) (Q-i) (R-v) (S-iv)

(B) (P-i) (Q-iii) (R-iv) (S-v)

(C) (P-iii) (Q-v) (R-iv) (S-ii)

(D) (P-ii) (Q-iv) (R-v) (S-ii)

Ans:d

99. Which component are basic in maintaining body processes?

(A) Carbohydrate

(B) Water

(C) Energy

(D) All of this

Ans:d

100. What is mycorrhiza ?

(A) Root + Fungi = Symbiotic

(B) Root + bacteria = Symbiotic

(C) fungi +Root = Parasitism

(D) Fungi +leaf = Parasitism

Ans:a

101. It is key-compound for all living organism ?

(A) Sulphur

(B) Phosphorus

(C) Nitrogen

(D) Calcium

Ans:b

102. What is obtained by the activity of decomposer for the producers ?

(A) Nutrient

(C) Food

(B) Carbohydrate

(D) Energy

Ans:a

103. If 1 lac living organisms are included in third trophic level then what would be the number of producers ?

(A) 10 lac

(B) 10 thousand

(C) 1 thousand

(D) 1 crore (million)

Ans:d

104. In an ecosystem, when organisms can be included in more than one trophic level ?

(A) Phytoplankton

(B) Fish

(C) Zooplankton

(D) Frog

Ans:b

105. When organism of aquatic ecosystem is at equivalent trophic level in when cow is included ?

(A) Zooplankton

(B) Phytoplankton

(C) Nekton

(D) Benthos

Ans:a

106. Which of the follows is a complete Ecosystem ?

(A) Grass land

(B) Cave

(C) River

(D) Wet land

Ans:b

107. What is correct for human ?

(A) Herbivore

(B) Carnivore

(C) Autotrophs

(D) Omnivores

Ans:d

108. Which type of food chain is represented by following example Dead animal → insect → scavenger → Frog → Snake?

(A) Grazing food chain

(B) Detritivorous food chain

(C) Decomposer food chain

(D) Predators food chain.

Ans:b

109. which type of organisms , fungi & Bacteria of forest ecosystem generally called ?

- (A) Producers (B) Decomposers  
(C) Primary consumer (D) Secondary consumers

Ans:b

110. what is correct for the artificial ecosystem ?

- (A) Biodiversity is less (B) Biodiversity is High  
(C) Ecosystem can not be form by human (D) It is more stable than Natural ecosystem

Ans:a

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