

Chapter-13 Organism and Population

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(Adopted for educational social service purpose only).

NEET Biology MCQ

Chapter-13 Organism and population

1. What is true for the following statements ?

Statement X: Migration of birds is influenced by light.

Statement Y: Reproduction of birds is influenced by light.

Statement Z: In all birds gonads are activated due to increase in intensity of light during summer.

- (a) True False False (b) False True (c) False True True (d) True True False

Ans:a

2. What is true for the given statements ?

Statement X: Birds and Mammals obtain greater body size in cold region than in warm regions.

Statement Y: Birds and Mammals are Homeothermic(warm blooded)animals.

Statement Z: Reptiles are smaller in cold region.

- (a) True False True (b) True True False (c) True True (d) False True True

Ans:d

3. "Spiny lizard" absorbs water from the atmosphere which is appropriate similar functional option for the statement ?

- (a) Tongue of Human (b) Hygroscopic roots of orchid
(c) Roots of plants (d) None of these

Ans:b

4. What is true for the following statements?

Statement X: Marine fishes have chloride secretory cells.while riverine fishes have chloride cells.

Statement Y: Compared to marine water, fluid present in fish is hypotonic while riverine water is hypertonic compared to fluid present in fish. X Y

- (A) True True (B) False False (C) True False (D) False True

Ans:c

5. Which animal is capable of obtaining water by oxidation of lipid.
(a) Rat (b) Earthworm (c) Mole (d) Kangaroo rat

Ans:d

6. Which is the example of intraspecific competition for food ?
(a) Barnacle on rocks of the submerged water
(b) Two female dogs and two male dogs
(c) Various types of lichens
(d) Paramecium caudatum and P. aurelia in laboratory.

Ans:b

7. Name the animals with freshwater habit in which
(i) endosmosis is possible
(ii) Excess water is removed by green glands
(iii) Green glands remove water in the form of urine
(a) Fresh water fishes (b) opistocephalus
(c) Crustacean astacus (d) None of these

Ans:c

8. In snakes realised (actual) natality is less than potential natality; because.....
(a) all the eggs are not incubated
(b) environmental biotic resistance
(c) Though eggs are incubated they do not reach up to adult stage.
(d) All of these.

Ans:d

9. Identify me "My functioning is like an orchid."
(a) Protopterus (b) Spiny lizard (c) uromastix (d) Spiny platypus

Ans:b

10. Crustacean Astacus = Green land Marine turtle what is 'X' according to the information given?
(a) Salt gland (b) Kidney
(c) None of these (d) chlorine secretory cells

Ans: b

11. Which of the following is correct statement ?
(a) uromatrix lizard stores water in the intestine
(b) Camel stores water in its stomach
(c) Anabus develops accesary respiratory organs to respire in water.
(d) Kangaroo rat undegeoes hibernation.
Ans:c
12. Parasitic animal which is part of bio-geo community and included as zoo planktons and mesofauna of terrestrial ecosystem is
(a) Moles (b) mites (c) Earthworms (d) leech
Ans:b
13. From the given option which is the appropriate for ecto parasite animal Ascaris, Tapeworm, plasmodium, mites
(a) phytoplanktons (b) mesofauna
(c) macrofauna (d) phytoplanktons and mesofauna.
Ans:c
14. Which living organism is seen in the hot water spring having temperature more than 100°C.
(a) Methanogens (b) Thermoacidophils
(c) Helophytes (d) spirochete
Ans:b
15. Find out population density. Since last 4 years number of lions in a square forest is 500 (length of forest = 10 km)
(a) 1.25 lions/year.km²
(b) 12.5 lions/km² - year
(c) 1.025 lions/cm² month
(d) 12.5 lions/km² - month
Ans:b
16. Average human population in a certain time area is 5000 in which 1111 children are produced during an year, find out the birth rate ?
(a) 0.1111 (b) 0.3333 (c) 0.2222 (d) 0.4444
Ans:a

17. In birthrate and deathrate is equal, then what will be the Vital Index?
 (a) = 1 (b) = 100 (c) >100 (d) <100

Ans:c

18. Which option is correct for the given statement.
 Statement X: Density dependent factors are intrinsic
 Reason R : They are generated in population only

- (a) Both statement are true (b) Both statement are false
 (c) X is true, y is false (d) X is false, Y is true

Ans:a

19. In a population of frog 'I' type of population growth curve is seen than which information from the givengraph can be true for "point A"

- (i) Vital Index < 100
 (ii) Birth rate < death rate
 (iii) Birht rate > death rate
 (a) (b) II, III (C) I, III (d) I, II

Ans:d

20. The givengraph shows seasonal changes in the population of Birds of Gujarat in the year 2002. In the given graph what is true for point X ?

- (a) VitalIndex < 100 (b) VitalIndex = 100 (c) Vitalindex = 100 (d) None of these

Ans:d

21. J F M A J J A S O Producers ---->Decomposers ---->'X', then what will be 'X' ?

- (a) Nostoc (b) Fungi (c) Both of these (d) None of these

Ans:d

22. In given chart, what is the problem seen in living organism staying in X' denoted area ?

- (a) endosmosis (b) exosmsis
 (c) a&b both (d) geting water and maintaing it.

Ans:c

23. What is correct for the given statement ?

Statement P: Environmentalstudy is linked with ecology

StatementQ: Ecology is included in environmental study.

- (a) Both statement are true (b) Both statement are wrong

(c) P is right and Q is wrong (d) P is wrong and Q is right

Ans:a

24. What is the vital Index, if Birth rate is 10 and Death rate = 5 ?
 (a) 0 (b) 100 (c) 1 (d) None of these

Ans:a

25. Which If the Birth rate is 10 and death rate is 10 then what is VITAL INDEX ?
 (a) 0 (b) 100 (c) 1 (d) 1

Ans:c

26. Which is appropriate for the following statement ?
 Statement X: Pacific salmon fish reproduces only once in its life time.
 Statement Y: In a reproductive season it lays 2,80,000,000 eggs.
 (a) True True (b) False False (c) True False (d) False True

Ans:c

27. Mycobiont supplies X to phycobiont and phycobiont supplies Y to mycobiont, then what is true for X and Y ?
 (a) X: Mineral element; Y: Habitat
 (b) X: organic nutrients; Y: Inorganic Nutrient
 (c) X: Habitat Y: protection
 (d) X: Minerals Y: organic nutrients

Ans:d

28. A plant formed by the combination of algae and fungi is a pioneer of which type of succession?
 (a) Xerosere (b) Hydrosere (c) Mesosere (d) None of these

Ans:a

29. Y is an animal which is not affected by X. X shows excretory products which are also seen in Y and Z is located in its gills then.. what are X, Y, Z ?
 (a) X = Termite
 (b) X = shark Y = flagellates Y = Tortoise Z = Tentacles Z = Chlorine cell
 (c) X = shark
 (d) All of these (above) Y = fish Z = chlorine secreting cells

Ans:c

30. what does the given graph shows
(a) (i) Community Ecology (b) (i) Population Ecology (ii) Population Ecology
(ii) Community Ecology (iii) Population Ecology
(iii) Ecosystem Ecology (c) (i) Population Ecology
(d) None of these (ii) Community Ecology
(iii) Community Ecology
Ans:c
31. In a population of salmon fish, potential Natality is 10,000 while realised mortality is 200, then the Vital Index = (a) 50,
(b) less than 50 (c) more than 50 (d) None of these
Ans:b
32. Which of the following is not possible in ecosystem where microflora is absent (a) Photosynthesis (b) Decomposition (c) Assimilation (d) None of these
Ans:d
33. If marine fish is kept in fresh water, will it survive
(a) Yes, If chlorine cells are placed in its kidney
(b) Yes, If chlorine cells are placed in its green gland
(c) No, Because it can not adapt
(d) No, they can not survive but of young ones hatching out of their eggs can survive
Ans:c
34. What is true for both the organism showing interspecific competition?
(a) Both are benefited
(b) more or less harmful effect to both
(c) one is benefited where as other is at loss
(d) None of these
Ans:b
35. If at "t" time population density is N, then what is the equation for the population density at (t+1) time?
(a) $N(t+1) = Nt - [CD+E] - [B+1]$ (b) $N(t+1) = Nt+B+I-D-E$

(c) $N(t+1) = Nt + (B+1) - (D+E)$

(d) All of these

Ans:d

36. Write appropriate option for antibiosis

(a) Penicillium fungi and certain gram +ve bacteria

(b) Penicillium fungi and certain gram -ve bacteria

(c) Spirocheate and fermicutes

(d) None of these

Ans:a

37. The graph of age related distribution in a village is as following If during 1 year potential mortality = realized mortality, then which type of graph is seen after 1 year ?

Ans:d

38. What is true with the respect to energy flow? Figure Heat

Heat

Heat

Heat

a) Production 2 Herbivorous 222 Carnivorous 2??? Intense carnivorous Decomposers Decomposers Decomposers Decomposers

(b) 2 Production? Herbivorous 222 Carnivorous 2222 Intense carnivorous Decomposers Herbivorous 22 Carnivorous 2??? Intense carnivorous

(c) Production 2 Decomposers Heat

(d) Heat Heat Heat producers Herbivorous Carnivorous Intense carnivorous Decomposers Decomposers Decomposers Decomposers

Ans:d

39. In which subdivision of aquatic ecosystem thermal stratification is seen?

(a) marine

(b) deep fresh water habitat

(c) marine and fresh water area

(d) None of these

Ans:b

40. In which of the following aquatic ecosystems habitat fluid (liquid) is very concentrated compared to body fluid ?

(a) Marine

(b) Estuarine

(c) Riverine

(d) pond.

Ans:a

41. Which of the following is true with reference to temperature difference ?

(a) 1. Terrestrial Habitat > Aquatic Habitat

2. Sea < Deep fresh water lakes (b) 1. Aquatic Habitat > Terrestrial Habitat

2. Sea < Deep fresh water lake (c) 1. Terrestrial Habitat = Aquatic Habitat

2. Sea < Deep fresh water lake (d) 1. Terrestrial Habitat < Aquatic Habitat

2. Sea = Deep fresh water lake

Ans:a

42. Water holding capacity of land depends on ?

(a) Soil composition

(b) Grain size

(c) Aggregation of grain

(d) All of these

Ans:d

43. What true for the following statements? Statement X: During evolution many species, by continuous development of their internal environment, made their physiological processes more efficient. Statement Y: Organisms show adaptations in order to survive in the environment X Y X Y

(A) True True (B) False True

(C) True False

(D) False False

Ans:a

44. In which of the following organism water is stored in its transformed form and not water as such?

(a) camel

(b) Uromatrix

(c) Spiny tailed lizard

(d) rat

Ans:a

45. Which path is followed by plants as a part of adaptation in an ecosystem where Kangaroo rat is living?

(a) C3 Path

(b) C4 Path

(c) CAM Path

(d) TCA Path

Ans:c

46. Which is true for the following statements ? Statement X: Cursorial animals have spindle shaped body Statement Y: Because of narrow head they can prepare burrow properly X Y

- (a) True False (b) False True (c) False false (d) True True

Ans:d

47. What is the temperature at which archeobacteria can survive ?

- (a) 9021 (b) c 100m2c (c) 11022c (d) All of these

Ans:d

48. To whom can we correlate the young one developing from the eggs of Daphnia which are laid at normal room temperature ?

- (i) queen bee
 (ii) worker bee
 (iii) male (drone) bee
 (a) i, ii (b) i, iii (c) ii, iii (d) i, ii,iii

Ans:a

49. Which is appropriate option if we take 'T' for correct statement and 'F' for wrong statement ?

- (i) Energy pyramids are always upright.
 (ii) Detritus food chain begins with dead organic matter
 (iii) C4 path is the only path seen in xerophytes
 (iv) Biodiversity is less in equatorial region because of more sunlight
 (v) At normal Temperature daphnia lays parthenogenetic eggs. which develops into male(27)
 (a) TETTE (b) TFFFFF (c) FFFTE (d) TFFTF

Ans:b

50. Increase and decrease in a population in one of the places in USA, because of sandy cyclone is given below. Which type of graph is possible for total no. of individuals in a population v/s month?

Month	Birth rate	Immigration	Death	Emigration
July	40	100	30	0
August	20	0	0	0
September	100	0	0	0
October	200	50	0	200
November	800	100	0	0
December	10	0	100	0
January	5000	3000	0	0

- (a) S. Shaped (b) J. Shaped (c) irrupative (d) None of these

Ans:b

51. Hygroscopic skin is seen in.....

- (a) Kangaroo rat (b) Uromatrix (c) Spiny tailed lizard (d) Camel

Ans:c

52. What is true for marine animals ?

- (a) Because of exosmosis they drink sea water
(b) As they drink sea water exosmosis occurs
(c) Because of exosmosis body fluid become hypotonic, so they drink sea water
(d) None of these

Ans:a

53. In order to find out VITALINDEX in Rampur Village, following information was gathered
Death Rate = $1/x$

Birth Rate = Z Average population = $1/y$ What is the Vital Index ?

- (a) $xyz \times 100$ (b) $z/xy=100$ (c) $xy/z \times 100$ (d) $100/xyz$ All

Ans:a

54. What is the true for the community ecology diagram ?

- (a) Involvement of 4 individuals of a population
(b) Involvement of 4 population of a species
(c) Involvement of 4 species of a community
(d) Involvement of 4 species of 4 ecosystem

Ans:c

55. Match the column with column

I Column

Column II

(1) Asacus

(p) Hydrophilic skin

(2) Marine turtle

(q) green gland

(3) Spiny lizard

(r) water storage in intestine

(4) Uromatrix

(s) salt glands

(a)(1-9), (2-s), (3-p)

(b) (1-s), (2-a), (3-p)

(c) (1-s), (2-p), (3-9)(4-1) (4-r)

(d) (1-p), (2-q), (3-s)(4-r) (4-r)

Ans:a

56. Which of the following is incorrect if 'O' sign is used for beneficial and '+' sign for harmful?

- (a) Penicillium <--> Gram +ve bacteria; Penicillium: '+'
- (b) Rhizobium <--> plant- leguminosae family: Both 'O'
- (c) Tiger <--> Rabbit ; Tiger: 'O'
- (d) Shark fish <--> Suckerfish; Suckerfish ; 'O'

Ans: b

57. What will happen if 'X' which is related to this reaction is absent ?

- (a) Decomposition, essential process like death, will stop
- (b) Damage to ecosystem
- (c) Beginning of the food chain is not possible
- (d) All the statements given are correct

Ans: d

58. In the section of lichen which layer is seen just below "upper cortex"

- (a) Medulla
- (b) Algal layer
- (c) lower cortex
- (d) All of these

Ans: d

59. What is true for the given statements ?

Statement X: Protopterus aestivate during winter to overcome dry period

Statement Y: The process of aestivation in protopterus is to overcome unfavourable condition

- (a) Both statements are true
- (b) X-Correct Y-wrong
- (c) Both statements are wrong
- (d) X-wrong Y-correct

Ans: d

60. What is true for the given statement? Statement X: Most of the animals and almost all the plants cannot keep up their internal environment constant Statement Y: process of osmoregulation in plants is an example of this

- (a) Both statements are true
- (b) X- correct, Y-wrong
- (c) Both statements are wrong
- (d) X-wrong, Y-correct

Ans: a

61. which type of pyramid is true for the population having more number of pre reproductive and reproductive age group ?

a = post reproductive age group

b=reproductive age group

c = pre reproductive age group

X=Arthropods,

Y = Mollusca,

z = Coelenterates :-

Ans:b

62. If the X by using Y, lives beneficial life with z, then which of the following is correct example ?

(a) X = cockroach Y = pearl oyster Z = Hydra

(b) X = Millipede Y = pila Z= jellyfish

(c) X = Hermit crab Y = Gastropoda Z=sea anenone

(d) All ofthese

Ans:c

63. From the given option find out the correct pair ?

(a) Mesofauna- Earthworm

(b) Macrofauna - spider

(c) Microfauna – fungi

(d) None of these

Ans:c

64. Match column with column II Column - I

Column - I 1. Mutualism

(p) Barnacles 2. Competition

(a) Tiger 3. Predation

(r) Mites 4. Parasitism

(s) Sea anemone (a) (1-s), (2-r), (3-p) (4-q) (b) (1-r), (2-s), (3-q) (4-p)

(c) (1-s), (2-p), (3-q) (4-r) (d) (1-q), (2-r), (3-s) (4-p)

Ans:c

65. Give correct option for the given true and false statements

(i) Some insects, birds and mammals living in warm and dry climate have more darker black pigments than the races of same species living in cold and humid climate.

(ii) Temperature variation is much lesser in aquatic habitat compared to terrestrial habitat

(iii) In deep fresh water lakes, there is gradual increase in temperature from surface to the bottom

(iv) In an aquatic habitat production increases with insingdepth. (T =True, F = False)

(a) FFFF

(b) TFTF

(c) TTET

(d) FTET

Ans:d

66. X' is an example of Mutualism and 'Y' is an example of succession then which is the correct relationship?
- (a) X = Hermit Crab Y = Gastropod
(b) X=Sea anemone Y = mesosere Succession
(c) X = Lichen Y = Xerosere.
(d) X=Lichen Y=Hydrosere

Ans:c

67. At 't' time, population density is 'N' and at t+1 time population density is N_{t+1} . If $N_{t+1} - N_t$ then find out the correct option
- (a) $B-D + I-E = 270$ (b) $B-D+I-E = 0$ (c) $B+D+I+E=0$ (d) $B+D-I+E = 220$

Ans:b

68. Find out correct option P, Q, R, S, from the given diagram
- (a) population organism Ecosystem Biotic community
(b) Organism population Biotic community Ecosystem
(c) Ecosystem Biotic community population Species
(d) Biotic community Ecosystem Species population

Ans:b

69. Which of the following is not included as the climax community of general process of succession ?
- (a) Sedge-meadow stage (b) phytoplankton
(c) Forest (d) Grassland

Ans:b

70. How many sq. km. area of biosphere is occupied by marine habitat. ?
- (a) 3,62,000,000 (b) 36 crore 20 lacs

(c) 36,20 Million (d) all of these

Ans:d

71. What is percentage of earth is occupied by marine habitat ?

- (1)71% (2)4% (3) 67% (4) 29%
(a) 1,2 (b)2,3 (c) 1,4 (d) 1

Ans:d

72. What is the composition of soil with high waterlogging capacity?

- (a) Sandy soil (b) Black soil (loan soil)
(c) Rocky soil (d) Anyone of these

Ans:b

73. Recently a village was badly affected by jaundice and Dengue, which of the following will decrease due to this?

- (a) No. of persons (b) area (c) Birthrate (d) Death rate

Ans:a

74. Which is related to the given statement ? In the beginning of summer crow and koel lays eggs.

- (a) As the light intensity decrease reproductive organs become active
(b) In some Birds increase or decrease in intensity of light-makers reproductive organs active or inactive respectively
(c) with increase in temperature, gonads become active
(d) None of these

Ans:c

75. Population of CBM village year wise 2000 -----> 1000 2005 -----> 400 2010 -----> 600 2012 -----> 800 what will be the appropriate graph for this?

- (b) Irregular
(c) 'S' shaped
(d) J shaped

Ans:b

76. What is correct for the given statement ?

Statement X: Ascaris are permanent parasites

Statement Y: Ascaris lives inside the host's body

- (a) Both X&Y are correct (b) Both X&Y are wrong

(c) X is wrong Y is true (d) X is correct & Y is true

Ans:a

77. Depending on the study of bird population in different areas of North Gujarat for last 10 years (2000-2010) in which month population of bird is least ?

(a) February (b) September (c) April (d) October

Ans:b

78. Which is the correct option for the given table ?write 'T' if the given example is correct and 'F'for wrong example Information

Example Breed only once

Bamboo Breeds many time

Birds like pigeon, Mammals Small sized but many offspring's Pray Birds less in number but big size offspring's Only deep marine shishes

(a) TFTF (b) TTFF (c) FFTT (d) TFFF

Ans:b

79. Biological controlas pest controlin agriculture is an example of

(a) Predation (b) Competition (c) Emigration (d) diseases

Ans:a

80. The turtle of Galapagus island and the goats living there both were eating tender grass, state the relationship.

(a) Interspecific competition (b) Emigration
(c) predation (d) None of these

Ans:a

81. carryingcapacity of a population is determind by (BHU 2001)

(a) Birth rate (b) Death rate (c) limiting resources (d) Reproductive ability ...

Ans:c

82. Biotic community means....[CBSC, PMT - 2001]

(a) Group of Birds
(b) Group of species
(c) Group of interrelated population
(d) Groups of interrelated ecosystem

Ans:c

83. What is true for the members of same species [CBSC, PMT-2002]
- (a) Capacity of inter breeding (b) shows same ecological niche
(c) show different type of ecological niche (d) They have different Habitat

Ans:a

From Rajesh Kumar Principal, KV, Devlali