CPET-2021

WILD LIFE AND BIODIVERSITY CONSERVATION

SET-II

1. If the number of primary producers in a grassland ecosystem is approximately 6 million plants, the number of top carnivores (in million) supported by it, may be

a. 3

b. 30

c. 6

d. 60

2. Primary succession occurs on

a. Area destroyed due to forest fire

b. Newly formed river delta

c. Harvested crop field

d. All of these

3. In lithosere, foliose lichens make the conditions favorable for the growth of

a. Crustose lichen

b.Mosses

c. Annual grasses

d. perennial grasses

4. Which of the following is considered as pioneer community in xerach?

a. Annual herbs

b. Perennial herbs

c. Shrubs

d. Lichens

5. About 70% of the total global carbon is found in

a. Oceans

b. Forests

c. Grasslands

d. Agroecosystems

6. Which one of the following is not a gaseous biogeochemical cycle in ecosystem?

a. Sulphur cycle

b. Phosphorus cycle

c. Nitrogen cycle

d. Carbon cycle

7. Source of maximum sulphur is

a. Oceans

b. land

c. Rocks

d. Lakes

8. Which of the following is most important in water cycle?

a. Transpiration through leaves

b. Evaporation from the oceans
c. Percolation of water into the ground
d. Absorption of capillary water by plants
9. Out of the total proposed cost of various ecosystem services cost of climate regulations and habitat for wildlife are
a. 50%
b. 10%
c. 6%
d. 25%
10. The branch of science which studies the interactions among organisms, between organisms and physical environment is called as
a. Epidemiology
b. Ecology
c. Ethology
d. Etiology
11. Different biomes are formed due to annual variations in -------- over the earth's surface
a. Temperature
b. Precipitation
c. Incident solar radiation
d. All of these
12. The key elements that determine differences in environmental conditions of different habitats include
a. Temperature
b. Light
c. Soil
d. All of these
13. Temperature is considered as the most ecologically relevant environmental factor because it affects ------ of organisms.
a. Physiology
b. Morphology
c. Geographical distribution
d. All of these
14. Mangoes do not and cannot grow in temperate regions. The most important environmental factor responsible for it is
a. Soil
b. Temperature
c. Water
d. Light
15. Water is the second most important factor influencing life of organisms because
a. It makes major part of an organism's body
b. Productivity of plants depend upon availability of water
c. Life on earth originated in water

d. Both ‘a’ and ‘b’

16. A place has a very scanty rainfall, the dominant plants there may be

a. *Opuntia*

b. *Nymphaea*

c. *Asparagus*

d. both ‘a’ and ‘c’

17. A fresh water organism cannot survive in a water body that has greater ------- than its original habitat.

a. Nutrients

b. Depth

c. Salt concentration

d. Water clarity

18. Which of the following is not a part of an organism’s physical environment?

a. Temperature

b. Light

c. Other organisms

d. Humidity

19. Organisms that can tolerate a wide range of salt concentration are termed as

a. Stenosaline

b. Stenohaline

c. Euryhaline

d. Eurysaline

20. Many fresh water organisms cannot live for long in sea water because the surrounding water will be ---- to body cells and ------ may occur.

a.Hypertonic, Exosmosis

b. Hypertonic, Endosmosis

c.Hypotonic, Exosmosis

d. Hypotonic, Endosmosis

21. Which of the following algae are found in deepest ocean waters?

a. Red algae

b. Yellow algae

c. Green algae

d. Brown algae

22. Characteristics of a terrestrial biome are strongly influenced by its

a. Flora

b.Climate

c. Fauna

d. All of these

23. Water holding capacity of soil depends upon

a. Chemical composition of soil

b. Particle size of soil

c. Aggregation of soil particles

d. All of these
24. ---------- biomes are abundant in regions of hot and wet climate, while ---------biomes are found in hot and dry climate
a. Desert, Temperate
b. Tropical, Desert
c. Tundra, Savannah
d. Desert, Chapparal
25.Organisms that can maintain a constant internal temperature are called as
a.Homeothermic
b. Poikilothermic
c. Oligothermic
d. Heterothermic
26. Many animals use the diurnal and seasonal variations in light intensity and photoperiod to time their
a. Migration
b. Reproductive activities
c. Suspension
d. All of these
27. When organisms change their location to escape from harsh environment, it is called as
a. Hibernation
b. Vernalization
c. Migration
d. Aestivation
28. When we are in a hot room, we sweat profusely. It is a ---------means of maintaining homeostasis.
a. Morphological
b. Physiological
c. Behavioral
d. None of these
29. Organisms may avoid stressful conditions by suspending their activities for some time. If they do it to avoid high temperature it is called ---------- and if they do it to avoid low temperature, then it is called----
a. Aestivation, Migration
b. Migration, Hibernation
c. Aestivation, Hibernation
d. Hibernation, Aestivation
30. Organisms show migration in order to avoid unfavorable conditions of
a. Temperature
b. Food availability
c. Precipitation
d. All of these
31. Which of the following is an important adaptation of animals to cold climate

a. Thin layer body fat
b. Aestivation
c. Increased tendency to shiver
d. Reduced surface area to volume ratio

32. --------- is an attribute of the organism (morphological, physiological, behavioural) to survive and reproduce in its habitat.
a. Migration
b. Hibernation
c. Adaptation
d. Homeostasis

33. Archaebacteria that flourish in temperature above 100^0C have special -------- molecules that do not coagulate at high temperatures and remain functional.
a. Carbohydrate
b. Ester
c. Protein
d. Fat

34. -------- rule states that mammals from colder climates generally have shorter ears and limbs to minimize heat loss.
a. Allen's
b. Berger's
c. Borge's
d. Powell's

35. A behavioral strategy of adaptation called echolocation is found in
a. Bats
b. Butterfly
c. Praying mantis
d. Arctic tern

36. Radial vascular bundles characteristically occur in
a. Monocot and dicot stems
b. Monocot and dicot leaves
c. Monocot and dicot roots
d. All of these

37. Epidermal tissue system is derived from
a. Protoderm
b. Procambium
c. Periblem
d. Plerome

38. Vascular bundle is enclosed within a well developed schlerenchymatous sheath in
a. Monocot stem
b. Dicot stem
c. Monocot root
d. Dicot root

39. Cork is impervious to water due to the presence of ---------- in its cell wall.
a. Silica
b. $CaCO_3$
c. Suberin
d. Cuticle
40. During secondary growth in a dicot root, cork cambium is formed by the activity of
a. Cortex
b. Hypodermis
c. Pericycle
d. Epidermis
41. Visible part of electromagnetic spectrum consists of radiations having a wavelength in the range of
a. 400-800nm
b. 300-2600nm
c. 390-760nm
d. 650-760nm
42. Which one is involved in z-scheme of photosynthesis
a. PS I
b. PS-II
c. e^- carriers
d. All of these
43. For NADPH + H^+ formation
a. Only PS I is required
b. Only PS II is required
c. Both PS I and PS II are required
d. Only stroma is required
44. Respiratory quotient may be represented as
a. O_2 taken in/CO_2 evolved
b. CO_2 evolved/ O_2 taken in
c. O_2 taken in
d. CO_2 taken in
45. Anaerobic respiration takes place in
a. Mitochondrion
b. Nucleus
c. Cytoplasm
d. Vacuole
46. Kreb's cycle starts with the formation of a six carbon compound by reaction between
a. Fumaric acid and Pyruvic acid
b. OAA and acetyl CoA
c. Malic Acid and acetyl CoA
d. Succinic Acid and Pyruvic Acid
47. Alternate name of Kreb's cycle is

a. TCA cycle
b. Citric Acid cycle
c. Both ‘a’ and ‘b’
d. None of these

48. Burner’s gland is present in
a. Liver
b. Duodenum
c. Oesophagus
d. Stomach

49. One of the content of pancreatic juice which is poured into the duodenum in humans is
a. Trypsinogen
b. Chymotrypsin
c. Trypsin
d. Enterokinase

50. One haemoglobin carries how many molecules of oxygen?
a. 4
b. 2
c. 6
d. 8

51. The carbon dioxide is transported via blood to lungs mostly
a. In combination with haemoglobin only
b. Dissolved in blood plasma
c. In the form of bicarbonates
d. As carbamino haemoglobin

52. The CO_2 content by volume in the atmospheric air is about
a. 3.34%
b. 4%
c. 0.0314%
d. 2.1%

53. When CO_2 concentration in blood increases breathing becomes
a. Shallower and slow
b. There is no effect on breathing
c. Slow and deep
d. Faster and deeper

54. Artificial systems of classification were based upon
a. Vegetative characters
b. Androecium structure
c. Habit and habitat
d. All of these

55. --------- systems of classification were based on natural affinities among the organisms
a. Artificial
b. Natural

c. Phylogenetic
d. Sexual

56. Which out of the following are included under tracheophyta i.e. vascular plants?
a. Pteridophytes
b. Gymnosperms
c. Angiosperms
d. All of these

57. System of classification that employs numerical data to evaluate similarities and differences is known as
a. Cytotaxonomy
b. Biosystematics
c. Phenetics
d. Chemotaxonomy

58. A system of classification in which a large number of traits are considered is
a. Artificial system
b. Phylogenetic system
c. Synthetic system
d. Natural system

59. Each character is given equal importance and at the same time hundreds of characters can be considered in
a. Cytotaxonomy
b. Morphotaxonomy
c. Chemotaxonomy
d. Numerical taxonomy

60. At least a half of the total CO_2 fixation on earth is carried out through photosynthesis by
a. Angiosperms
b. Gymnosperms
c. Algae
d. Bryophytes

61. In most green algae, pyrenoids represent the storage bodies located in
a. Chloroplast
b. Mitochondria
c. Cytoplasm
d. Nucleus

62. Fusion of two gametes which are dissimilar in size is termed as
a. Oogamy
b. Isogamy
c. Anisogamy
d. Both 'a' and 'c'

63. Phycoerythrin is present in
a. *Euglena*
b. *Polysiphonia*

c. *Chlamydomonas*
d. *Fucus*
64. Which of the following have porous body and are diplobastic?
a. *Aurelia* and *Obelia*
b. *Adamsia* and *Euplectella*
c. *Leucosolenia* and *Spongilla*
d. *Sycon* and *Hydra*
65. Which of the following is not a characteristic feature of sponges?
a. Cellular level of organization
b. Presence of ostia
c. Intracellular digestion
d. Body supported by chitin
66. What is true about Nereis, scorpion, cockroach and silver fish?
a. They all possess dorsal heart
b. None of them is aquatic
c. They all belong to the same phylum
d. They all have jointed pair appendages
67. Bilateral symmetry, metameric segmentation, coelom and open circulatory system characterizes which of the following phylum?
a. Annelida
b. Mollusca
c. Arthropoda
d. Echinodermata
68. In which of the following, segmentation in the body is first observed?
a. Aschelminthes
b. Arthropoda
c. Annelida
d. Platyhelminthes
69. Among the following organisms which is a completely non parasitic form?
a. Sea anemone
b. Tapeworm
c. Leech
d. Mosquito
70. The limbless amphibian is
a. *Ichthyophis*
b. *Hyla*
c. *Rana*
d. Salamandra