



Padalsalai's Telegram Groups!

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CHAPTER – 6**Bio-Botany Model question- 2019****Time : 2.30 hrs****Class XII****Marks : 70****Section - A****Choose the correct answer:**

1.Light loving plants are called -----

a)heliophytes b)Sciophytes c)halophytes d)calciophytes

2.Size of the sandy soil is

a)0.002mm b)0.02mm c)0.2mm d)0.2 to 2mm

3.Plants living on rocky surface called

a)halophytes b)lithophytes c)sciophytes d)heliophytes

4.Mycorrhiza is an example for

a)mutualism b)commensalism c)amensalism d)competition

5.Assertion (A) : Velamen roots get water from atmosphere

Reason (R) : The aerial root of Vanda has spongy tissue called velamen

a)A is correct R is wrong b)A is wrong R is correct c)A & R is correct d)A & R wrong

6.Read the following statements and fill up the blanks with correct option

i)Total soil water content in soil is called -----

ii)Soil water not available to plants is called -----

iii)Soil water available to plants called -----

(i) (ii) (iii)

a)Holard - Echard - Chresard

b)Echard - Holard - Chresard

c)Chresard - Echard - Holard

d)Holard - Chresard - Echard

7.Pedogenesis refers to

a)water b)fossils c)population d)soil

8.The plant of this group are adapted to live partly in water and partly above substratum and free from water

a)Xerophytes b)Mesophytes c)Hydrophytes d)Halophytes

9.In a freshwater environment like pond, rooted autotrophs are

a)Nymphaea & Trapa b)Ceratophyllum & Utricularia c)Wolffia & Pistia d)Azolla & Lemna

10.Sticky glands of Boerhavia & Cleome support

a)Anemochory b)Zoochory c)Autochory d)Hydrochory

11.Which of the given plant produces cardiac glycosides?

a)Calotropis b)Acacia c)Nepenthes d)Utricularia

12.A specific place in an ecosystem where an organism lives and performs its functions is

a)habitat b)niche c)landscape d)biome

13.In soil, water available for plants is

a)gravitational water b)capillary water c)chemically bound water d)hygroscopic water

14.Plants which behave as xerophytes at summer and behave as mesophytes or hydrophytes at rainy season are called

a)Hygrophytes b)Tropophytes c)Halophytes d)Trichophytes

15.Read the statements and select the correct option

A)Cattle do not graze on weeds of Calotropis

B) Calotropis has thorns & spines as defense against herbivores

a) A & B are incorrect

b) A is correct B is incorrect

c) A & B are correct, but B is not the correct explanation of A

d) A & B are correct, but B is the correct explanation of A

Section – B

7 x 2 = 14

Answer any SEVEN questions (question 22 is compulsory)

16. Define ecology

17. Distinguish habitat and niche

18. Name the levels of ecological hierarchy

19. What are the ecological equivalents?

20. Mention any two significant roles of predation plays in nature

21. Sandy soil is not suitable for cultivation. Explain why?

22. What is Albedo effect and write their effects ?

23. What is vivipary? Name a plant group which exhibits vivipary

24. What is co-evolution?

25. Why ephemerals called drought escapers? Give examples

Section – C

Answer any SEVEN questions (question 32 is compulsory)

7 x 3 = 21

26. Write short notes on seedball

27. List out the effects of fire to plants

28. List out the types of hydrophytes with examples

29. Why loamy soil is ideal soil for cultivation ?

30. Define thermal stratification with its types

31. Write any three effects of wind

32. What are the types of distribution of vegetation based on water retention, aeration and minerals in soil ?

33. What are hemiparasites?

34. Write the anatomical adaptations of hydrophytes

35. Write short notes on halophytic plants

Section – D

Answer the questions

4 x 5 = 20

36. What are the advantages of Seed dispersal? (Or)

Enumerate the anatomical adaptations of Xerophytes

37. Describe the dispersal of fruits and seeds by animals (or)

What is Soil profile? Explain the characters of different soil horizons

38. Describe the negative interactions between biotic factors (or)

Write important edaphic factors which affect the vegetation

39. Describe the ecological adaptations of Mesophytes (or)

List out five morphological adaptations of Halophytes

KEY Section –A

- 1.a)Heliophytes
- 2.d)0.2 to 2mm
- 3.b)lithophytes
- 4.a)mutualism
- 5.c)A & R is correct
- 6.a)Holard -Echard - Chresard
- 7.d)soil
- 8.d)halophytes
- 9.a)Nymphaea & Typha
- 10.b)Zoochory
- 11.a)Calotropis
- 12.b)niche
- 13.b)capillary water
- 14.b)Tropophytes
- 15.b)A is correct but B is incorrect

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CHAPTER 7**Bio-Botany Model question -2019****Time :2.30Hrs****Class : XII****Marks : 70****Section – A****15 x1 =15**

- 1.Which of the following is not a abiotic component of ecosystem?
a)bacteria b)humus c)organic compounds d)inorganic compounds
- 2.Solar energy used by green plants for photosynthesis is only
a)2 -8% b)2 – 10 % c)3 -10 % d)2 – 9 %
- 3.Green plants absorb the light for photosynthesis in the range of
a)300 -800 nm b)400 -800nm c)400 – 700 nm d)600 – 700 nm
- 4.Ecosystem consists of
a)decomposers b)producers c)consumers d)all the above
- 5.Which of the following are not regulating services of ecosystem services
i)genetic resources ii)regreation & aesthetic values iii)invasion resistance iv)climatic regulation
a) i & iii b) ii & iv c) i & ii d) i & iv
- 6.Significance of food web is
a)it does not maintain stability in nature b)it shows patterns of energy transfer c)it explains species interactions d) b and c
- 7.Which of the following ecosystem has the highest primary productivity?
a)Pond ecosystem b)Lake ecosystem c)Grassland ecosystem d)Forest ecosystem
- 8.Which of the following is not a sedimentary cycle?
a)Nitrogen cycle b)Phosphorous cycle c)Sulphur cycle d)Calcium cycle
- 9.Profundal zone is predominated by heterotrophs in a pond ecosystem, because of
a)with effective light penetration b)no effective light penetration c)complete absence of light d) a & b
- 10.Which of the following is/are not the mechanism of decomposition?
a)eluviations b)catabolism c)anabolism d)fragmentation
- 11.The structural and functional unit of ecology is known as
a)ecotone b)ecosystem c)biotope d)succession
- 12.Microconsumers are called
a)invaders b)plants c)homosapiens d)decomposers
- 13.Assertion : During photosynthesis light energy is converted into chemical energy
Reason : The energy stored in starch is acquired from the light
a)A is correct R is wrong b)A is wrong R is correct c)A and R is wrong d)A and R is correct
- 14.The succession in a freshwater ecosystem is referred as
a)hydrosere b)lithosere c)xerosere d)psammosere
15. Ten percent law states that
a)10% of energy stored b)10% of energy loss c)10% of energy stored and loss
d)10% of energy stored and 10% of energy loss in same organism

Section – B**Answer SEVEN questions****7 x 2 =14**

- 16.What are pioneers?
- 17.What is mesosere?
- 18.What is flagship species?
- 19.Write about the statement of “ecosystem services” defined by Robert Constanza et al.,
- 20.Define – Limnology

- 21.What is meant by bio-geo chemical cycle?
- 22.What is fragmentation?
- 23.Draw a neat sketch about grazing food chain
- 24.Write the first law of thermodynamics
- 25.Define the term biomass

Section - C

Answer SEVEN questions

7 X 3 =21

- 26.Write about the heterotrophic components of ecosystem
- 27.Describe the net productivity
- 28.Draw the diagrammatic representation of the various trophic levels
- 29.What is food web? Draw a food web in a grassland ecosystem
- 30.Write any three characteristics of ecological succession
- 31.Write the flow chart of classification of plant succession
- 32.How to protect the ecosystem? (Write any 6 activities)
- 33.What are the significances of food web?
- 34.Generally in summer the forest are affected by natural fire. Over a period of time it recovers itself by the process of successions. Find out the types of succession and explain.

Section - D

Answer any FOUR questions

4 x 5 =20

- 35.Differentiate primary succession and secondary succession
- 36.What are the strategies of ecosystem management?
- 37.Describe the various stages of decomposition process
- 38.What are significances of plant succession?
- 39.Give a detailed account of biotic and abiotic components of a pond ecosystem
- 40.Describe the various stages of hydrosere

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ANSWER KEY

1. a) Bacteria
2. b) 2 - 10%
3. c) 400 – 700nm
4. d) all the above
5. c) i & ii
6. d) b and c
7. d) forest ecosystem
8. a) nitrogen cycle
9. b) no effective light penetration
10. c) anabolism
11. b) ecosystem
12. d) decomposers
13. d) A and R correct
14. a) hydrosere
15. a) 10% of energy stored

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