

Botany Model questions (2020)
B.Sc. IV semester
Paper – Ecology and Environment
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1. The term Ecology was given by – **Ernst Haeckel**
2. The term Ecosystem was given by – **A.G. Tansley**
3. The term Biocoenosis for Ecosystem was given by – **Karl Moebius**
4. Every ecosystem performs two functions – **1. Flow of energy 2. Cycling of materials**
5. Every ecosystem has producers which are all – **Green plants**
6. The primary consumers of ecosystems are – **Herbivore animals**
7. In any food chain the maximum number of organisms can be – **5**
8. Consumers which obtain the nutrition from their host without killing them are called – **Parasites**
9. The function of cleaning the ecosystem is performed by - **Decomposers**
10. The quantity of organic matter/biological matter present in an ecosystem is called as – **Standing crop**
11. The quantity of abiotic matter present in an ecosystem which is available is called as – **Standing state**
12. From one trophic level to the next trophic level the amount of energy reached is only – **10%**
13. Ten percent law is related with – **Flow of energy**
14. Energy flow diagram was first given by – **Lindemann**
15. Different food chains of a community/ecosystem are linked together by – **Food web**
16. The food chain which starts from dead organic matter is called as – **Detritus food chain**
17. The concept of Food pyramid was first given by – **Charles Elton**
18. Which pyramid is always upright - **Pyramid of energy**
19. In parasitic food chain the pyramid of number is – **Inverted**

20. Inverted pyramid of biomass is found in – **Pond ecosystem**
21. The plant community which prefers to grow in shade is called as – **Sciophytic**
22. Heliphytic community prefers to grown in – **Abundant sunlight**
23. The external appearance of a vegetation is called as – **Physiognomy**
24. Concept of Growth forms for plant community was given by – **Raunkiaer**
25. Classification of plants into different growth forms is based on – **Protection of growing buds**
26. Annual plants which complete their life cycle in very short time span of favourable environmental conditions are called as – **Therophytes**
27. Phanerophytes are the dominant vegetation of – **Tropical Rain Forests**
28. Geophytes are also known as – **Cryptophytes**
29. Percentage distribution of different life forms in a community is called as – **Biological spectrum**
30. Highest vertical stratification is found in – **Tropical Rain forests**
31. The amount of organic matter which is stored in plant tissue after respiration is – **Net Primary Productivity**
32. Production of biomass in animals / consumers is called as – **Secondary production**
33. Increasing use of fossil fuel today is increasing the rate of – **Carbon Cycle**
34. Nitrifying bacteria are – **Nitrosomonas and Nitrobacter**
35. Ability to fix biological nitrogen fixation is found only in – **Prokaryotes/Bacteria**
36. In Casuarina tree the symbiotic bacteria involved in biological nitrogen fixation is – **Frankia**
37. Non-symbiotic biological nitrogen fixation is done by – **Cyanobacteria/ Azotobactor/ Clostridium**
38. Denitrifying bacteria is – **Pseudomonas**
39. The ability of a population to increase in size through the birth rate is called as – **Natality**
40. The organisms which are short-lived, reproduce profusely and grow in very short time follow the – **J-shaped growth curve.**

41. The organisms which are short-lived, reproduce profusely and grow in very short time are called as – **r-selected species**
42. The maximum number of individuals of an species that can survive in a community is called as – **Carrying capacity.**
42. The diagrammatic representation of Importance Value Index is called as – **Phytograph**
43. The zone of transition between two different communities is called as – **Ecotone**
43. Ecotone regions are marked by the – **Higher species diversity than adjacent communities**
44. Vegetation of Uttrakhand can be divided into – **3 zones**
45. Sub-alpine zone of vegetation in Uttarakhand starts from – **3000 meter altitude**
46. *Betula* (Bhojpatra) belongs to – **Sub-alpine zone of vegetation**
47. Soil erosion is a type of – **Soil pollution**
48. Soil erosion is Creeping death of soil was called by – **RamaRao**
49. When micro-channel like structures are formed in the soil due to continued sheet erosion, then it takes the form of – **Rill erosion**
50. Continuous rill erosion leads into – **Gully erosion**
51. Surface creeping is an example of – **Wind erosion**
52. When the crops are planted in a row across the slope to check the water flow, it is called as – **Contour forming**
53. Covering the deep rooted crop stubbles by the straw is called as – **Mulching**
54. To prevent the spread of deserts or sand dunes – **Mixture of water, latex and solvent is sprayed.**
55. Cultivation of purely rainfed crops in dry areas is called as – **Dryland farming**