



**PRESIDENCY UNIVERSITY  
BENGALURU  
SCHOOL OF ENGINEERING  
END TERM EXAMINATION - FEB 2023**

**SET - B**

Roll No :	UID No :
Program :	Branch :
Semester :	Section :
Course Code / Name :	No. of Supplements used :
Signature of the Student with Date :	Signature of the Invigilator with Date :

**Semester :** Semester I - 2022

**Date :** 24-FEB-2023

**Course Code :** CHE1018

**Time :** 1.00PM - 3.00PM

**Course Name :** Sem I - CHE1018 - Environmental Science

**Max Marks :** 100

**Program :** B.Tech - (All Programs)

**Weightage :** 50%

**Instructions:**

- (i) Read all questions carefully and answer accordingly.
- (ii) Question paper consists of 3 parts.
- (iii) Scientific and non-programmable calculator are permitted.

**ANSWER ALL THE QUESTIONS**

**(50 X 2 = 100M)**

1. Ecosystem contains \_\_\_\_\_ (CO1) [Knowledge]  
a) Producers [     ]  
b) Consumers  
c) Decomposers  
d) All the above
2. A \_\_\_\_\_ depicts feeding connections (what-eats-what) in an ecological community and hence is also referred to as a consumer- resource system (CO1) [Knowledge]  
a) Food conservation [     ]  
b) Food Chain  
c) Food web  
d) None of these
3. The pyramid of energy is \_\_\_\_\_ (CO1) [Knowledge]  
a) always inverted [     ]  
b) always upright  
c) both upright and inverted  
d) none of the above

4. The source of energy in an ecosystem is \_\_\_\_\_ (CO1) [Knowledge]  
a) sun light [ ]  
b) decomposition of animals and plants by bacteria  
c) photosynthesis by plants  
d) fermentation by sugar
5. In an upright pyramid of biomass, the herbivores occupy the position \_\_\_\_\_ (CO1) [Knowledge]  
a) 1 [ ]  
b) 2  
c) 3  
d) 4
6. Ecosystem has two components \_\_\_\_\_ (CO1) [Knowledge]  
a) plants and animals [ ]  
b) biotic and abiotic  
c) animals and birds  
d) vertebrates and non-vertebrates
7. If all the green plants disappear from the Earth \_\_\_\_\_ (CO1) [Knowledge]  
a) all the animals will die [ ]  
b) only carnivores will die  
c) only herbivores will die  
d) it will not matter to any animal
8. Importance of food web includes \_\_\_\_\_ (CO1) [Knowledge]  
a) Opens flow of energy [ ]  
b) Number of options are available at each trophic level  
c) Gives greater stability to the ecosystem  
d) All the above
9. The major matters that are recycled through the biotic and abiotic components of the ecosystem \_\_\_\_\_ (CO1) [Knowledge]  
a) Carbon, Helium, Neon, Ozone, Phosphorus, Sulphur [ ]  
b) Carbon, Chlorine, Nitrogen, Oxygen, Phosphorus, Selenium  
c) Carbon, Water, Nitrogen, Oxygen, Phosphorus, Sulphur  
d) Carbon, Copper, Sodium, Oxygen, Fluorine, Sulphur
10. Which of the following is not correct about the objectives of environmental studies defined by UNESCO? (CO1) [Knowledge]  
a) Developing an attitude of concern for the environment [ ]  
b) Exploring Nature  
c) Motivating public to participate in environment protection and environment improvement  
d) Creating the awareness about environmental problems among people
11. Examples of Omnivores \_\_\_\_\_ (CO1) [Knowledge]  
a) Frog and small bird [ ]  
b) Fox and Lion  
c) Elephant and Camel  
d) Man and Rat

12. Example of Primary consumers \_\_\_\_\_ (CO1) [Knowledge]  
a) Lion [ ]  
b) Grasshopper  
c) Snake  
d) All the above
13. Ecology deals with the study of \_\_\_\_\_ (CO1) [Knowledge]  
a) Environment [ ]  
b) Living and non-living substances  
c) Living beings  
d) All the above
14. The driving force of the ecosystem is \_\_\_\_\_ (CO1) [Knowledge]  
a) carbohydrates in plants [ ]  
b) producer  
c) solar energy  
d) biomass
15. \_\_\_\_ perform an invaluable service in the ecosystem by decomposing the organic matter and make it available for reuse (CO1) [Knowledge]  
a) Omnivores [ ]  
b) Carnivores  
c) Decomposers  
d) All the above
16. The egrets feed off of lizards and insects forced out of hiding while the buffalo moves through the grass. This is an example of \_\_\_\_\_ (CO2) [Knowledge]  
a) Predation [ ]  
b) Parasitism  
c) Commensalism  
d) Mutualism
17. How many countries are identified as megadiverse countries by Conservation International? (CO2) [Knowledge]  
a) 17 [ ]  
b) 20  
c) 25  
d) 26
18. Some species are very rare and can be found in a particular ecosystem, these species are called \_\_\_\_\_ (CO2) [Knowledge]  
a) Extinct species [ ]  
b) Endemic species  
c) Special species  
d) Pandemic species
19. Saber toothed cat is an example of \_\_\_\_\_ (CO2) [Knowledge]  
a) Endangered species [ ]  
b) Growing species  
c) Migrating species  
d) Extinct species

20. One of the ways for biodiversity conservation can be \_\_\_\_\_ (CO2) [Knowledge]  
a) Gene bank [ ]  
b) Seed bank  
c) Controlling urbanization  
d) All the above
21. \_\_\_\_\_ is an example of an ex-situ conservation. (CO2) [Knowledge]  
a) Biosphere reserves [ ]  
b) Wildlife sanctuary  
c) Seed bank  
d) National park
22. Pollination is an example of \_\_\_\_\_ (CO2) [Knowledge]  
a) Predation [ ]  
b) Parasitism  
c) Commensalism  
d) Mutualism
23. Which of the following is true about species diversity? (CO2) [Knowledge]  
a) it refers to the species richness only [ ]  
b) it refers to the species evenness only  
c) it is a combination of both species richness and abundance  
d) none of the above
24. Species diversity is the diversity at the \_\_\_\_\_ Level. (CO2) [Knowledge]  
a) population [ ]  
b) community  
c) species  
d) size
25. \_\_\_\_\_ is the diversity of genes within a species. (CO2) [Knowledge]  
a) genetic diversity [ ]  
b) species diversity  
c) ecosystem diversity  
d) mega diversity
26. \_\_\_\_\_ is now an extinct animal. (CO2) [Knowledge]  
a) Quail [ ]  
b) Javan rhino  
c) Tasmanian tiger  
d) Pangolin
27. \_\_\_\_\_ is defined as an ecological state of a species being unique to a specific geographic location. (CO2) [Knowledge]  
a) Exotic species [ ]  
b) Endemic species  
c) Ecosystem  
d) None of the above

28. Barnacles on a Whale is an example of \_\_\_\_\_ (CO2) [Knowledge]  
 a) Predation [ ]  
 b) Parasitism  
 c) Commensalism  
 d) Mutualism
29. Biodiversity can be broadly classified into how many types? (CO2) [Knowledge]  
 a) 2 [ ]  
 b) 5  
 c) 3  
 d) 4
30. Which one of the following pairs of geographical areas are coming under biodiversity hotspot in India? (CO2) [Knowledge]  
 a) Sunderbans and Rann of Kutch [ ]  
 b) Eastern Ghats and West Bengal  
 c) Eastern Himalayas and Western Ghats  
 d) Kerala and Punjab
31. To be classified as a biodiversity hotspot, a region must have lost at least \_\_\_\_\_ of its original natural vegetation, usually due to human activity (CO2) [Knowledge]  
 a) 70 percent [ ]  
 b) 10 percent  
 c) 40 percent  
 d) 59 percent
32. To accurately determine species diversity, both the \_\_\_\_\_, which is the number of different species, and the \_\_\_\_\_, which is the number of individuals within each species, must be considered. (CO2) [Knowledge]  
 a) Coevolution, commensalism [ ]  
 b) Climatic conditions, population density  
 c) Species richness, relative abundance  
 d) None of the above
33. The species richness depends largely on climatic conditions. True or False (CO2) [Knowledge]  
 a) False [ ]  
 b) True  
 c) More information is needed to decide  
 d) none of the above
34. The cheetahs and deer are an example of \_\_\_\_\_ (CO2) [Knowledge]  
 a) Predation [ ]  
 b) Parasitism  
 c) Competition  
 d) Mutualism
35. How much of the world's plants and land vertebrates live in the hotspot regions? (CO2) [Knowledge]  
 a) 11%, 37% [ ]  
 b) 44%, 35%  
 c) 23%, 17%  
 d) 15%, 35%

36. Which of the following is NOT a man made activity that can cause Air pollution? (CO3) [Knowledge]  
a) CO from vehicles [ ]  
b) SO<sub>2</sub> from power stations  
c) NO<sub>x</sub> from vehicles  
d) smoke from volcanoes
37. Loud speakers, plumbing, boilers, generators and vacuum cleaner are relevant to \_\_\_\_\_ type of hazard. (CO3) [Knowledge]  
a) E-waste [ ]  
b) Chemical  
c) Noise  
d) Biological
38. Which of the following is not a stationary source of Air pollution? (CO3) [Knowledge]  
a) Industrial processing [ ]  
b) Fuel combustion  
c) Highway traffic  
d) Power plants
39. The air pollutants that can cause acid rain are \_\_\_\_\_ (CO3) [Knowledge]  
a) Carbon monoxide [ ]  
b) Sulphur dioxide  
c) Hydro carbons  
d) All the above
40. The rate of consumption of ground water is very high in urban areas due to \_\_\_\_\_ (CO3) [Knowledge]  
a) High population density in urban areas [ ]  
b) Disposal of a large amount of solid waste  
c) Non availability of free and clean air and space  
d) All the above
41. \_\_\_\_\_ are chemicals or types of radiation that can cause or promote cancer. (CO3) [Knowledge]  
a) Mutagens [ ]  
b) Carcinogens  
c) Teratogens  
d) All the above
42. Which of the following are air pollutants? (CO3) [Knowledge]  
a) Particulate Matters [ ]  
b) Carbon monoxide  
c) Nitrogen Dioxide  
d) All the above
43. The food is responsible for obesity is \_\_\_\_\_ (CO3) [Knowledge]  
a) Carbohydrate [ ]  
b) Protein  
c) Fats  
d) Vitamins

44. Which of the following is a disadvantage of most of the non-renewable energy sources? (CO3) [Knowledge]  
a) Pollution- emit harmful gases which lead to smog [ ]  
b) Greenhouse effect  
c) Do not replenish quickly as we use them  
d) All the above
45. What type of energy is derived from the heat that is trapped beneath the earth's crust ? (CO3) [Knowledge]  
a) Geothermal energy [ ]  
b) Solar energy  
c) Tidal energy  
d) Hydroelectric energy
46. Which of the following is the non-renewable energy source? (CO3) [Knowledge]  
a) Solar energy [ ]  
b) Coal  
c) Tidal energy  
d) Biomass
47. The example of brackish water is \_\_\_\_\_ (CO3) [Knowledge]  
a) River water [ ]  
b) Sea water  
c) Ground water  
d) Pond water
48. Pollutants in the water will alter the overall chemistry of water. True or False (CO3) [Knowledge]  
a) True [ ]  
b) False  
c) More information is needed to decide  
d) None of the above
49. Which of the following is NOT a greenhouse gas? (CO3) [Knowledge]  
a) Nitrogen [ ]  
b) Water vapor  
c) CO<sub>2</sub>  
d) Nitrous Oxide
50. Which of the following sources are responsible for the cause of air pollution? (CO3) [Knowledge]  
a) From incinerators [ ]  
b) Emissions from vehicles  
c) Both incinerators and emissions from vehicles  
d) None of the above

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