

Shivaji University, Kolhapur
Question Bank for Mar 2022 (summer) Examination

Subject Code:- 74439

Subject Name:- Bsc-Msc Nano Sci & Tech (Cr) Sem IV - Environment Studies

Course Name:- Bsc-Msc Nano Science & Technology Cr System

Q1) Multiple Choice Question

[1 mark each]

- 1) Which of the following is not the Renewable source of energy?
 - a) Water
 - b) Wind
 - c) Uranium
 - d) Solar
- 2) The occurrence of pesticides like DDT in higher trophic levels is termed as
 - a) Bioremediation
 - b) Bio pollution
 - c) Biological enhancement
 - d) Biomagnifications
- 3) Eutrophication is-----
 - a) Water treatment process
 - b) Accumulation of plant nutrient in water leads algal boom
 - c) Process of mineral cycle
 - d) Organic farming
- 4) Following is/are the source of Marine pollution
 - a) Oil spills
 - b) Radioactive substances
 - c) Factory exhaust
 - d) All of the above
- 5) Which of the following is a point source of water pollution?
 - a) Agricultural lands
 - b) Suburban land
 - c) Factory
 - d) None of the above
- 6) Following three R' regarded as environmental friendly practice
 - a) Read, Register, Recall
 - b) Renewable, Reduce, Regenerate
 - c) Reduce, Reuse, Recycle
 - d) Reduce, Rebuilt, Restrict
- 7) The darker zone in lakes where light penetration is negligible is called
 - a) Limnetic zone
 - b) Littoral zone
 - c) Profundal zone

- d) None of the above
- 8) PAN is a type of ----- pollutant.
- a) Primary pollutant
 - b) Secondary pollutant
 - c) Tertiary pollutant
 - d) None of the above
- 9) 'Environmental studies discipline has-----scope .
- a) Multiple and multilevel
 - b) Unilateral
 - c) Important
 - d) Natural
 - d) 53%
- 10) A systematic process of conversion of productive land into unproductive arid land called ----
- a) Shifting cultivation
 - b) Diversity
 - c) Deforestation
 - d) Desertification
- 11) Conservation within the natural habitat is-----
- a) Ex-situ conservation
 - b) In-situ conservation
 - c) Internal conservation
 - d) In-vivo conservation
- 12) The organisms which feed on dead organisms and excreta of living organisms are known-----
- a) Decomposers
 - b) Renewable
 - c) Abundant
 - d) None of the above
- 13) When is the World Wildlife week celebrates?
- a) First week of September
 - b) Last week of September
 - c) Last week of August
 - d) First week of October
- 14) 'Smog' is a mixture of-----
- a) Dust and gas
 - b) Smoke and dust
 - c) Snow and fog
 - d) Smoke and fog

- 15) Best method of proper solid waste disposal is -----?
- Disposed into land
 - Burning
 - Disposed into ocean
 - Sanitary landfill
- 16) Acid rain happens due to reaction of -----in atmosphere
- Atmospheric water and carbon monoxide
 - Sulphuric acid and atmospheric water
 - Sulphuric acid and carbon dioxide
 - Nitrogen oxide and oxygen
- 17) The surface area from which runs off rainwater is collected is called -----
- Rainwater Harvesting
 - Catchment Area
 - Water establishment
 - None of the above
- 18) Which of the following is the most environmental friendly agriculture practice?
- Organic farming
 - By chemical fertilizer
 - By pesticides
 - None of the above
- 19) The order of basic processes involved in succession is---
- Nudation->stabilization-> competition and co action->Invasion->reaction
 - Nudation->Invasion-> competition and co action->reaction->stabilization
 - Invasion-> Nudation->competition and co action->Reaction->stabilization
 - Invasion->stabilization-> competition and co action->Reaction->nudation
- 20) Biogas contains mainly is-----
- Propane
 - Methane
 - Butane
 - Carbon dioxide
- 21) Food webs are-----
- Interlocking food chains
 - Linear arrangement of food chains
 - A portion of a food chain
 - None of the above
- 22) Which of the following is a point source of water pollution?
- Agricultural lands
 - Suburban land
 - Factory

d) None of the above

23) The impact / disadvantage of construction of dams

- a) Flash floods
- b) Submerged forest
- c) Rehabilitation of people
- d) All of the above

24) The study of interrelationship between living and non-living organisms and environment is called

- a) Ecosystem
- b) Environment
- c) Ecology
- d) All of the above

25) The First Earth summit of United Nation was held in-----

- a) Stockholm
- b) Tokyo
- c) New York
- d) Montreal

26) Which of the following is the Renewable source of energy?

- a) Petroleum
- b) Uranium
- c) Wind
- d) Coal

27) Minamata disease cause is a -----mixing into water resources.

- a) Mercury
- b) Cadmium
- c) Lead
- d) Zinc

28) Mineral are ----- and finite resources

- a) Location specific
- b) Renewable
- c) Abundant
- d) None of the above

29) Soil erosion removes surface soil which contains-----

- a) Sand
- b) Parental rock
- c) Organic matter
- d) Smoke and dust

- 30) Chipko movement was started by -----
- a) Bindeshwari Dube
 - b) Sundarlal Bahuguna
 - c) Medha Patkar
 - d) Prakash Amate
- 31) Mineral are ----- and finite resources.
- a) Location specific
 - b) Renewable
 - c) Abundant
 - d) None of the above / वरीलपैकी काहीही नाही
- 32) The pyramid of numbers is inverted in the case of----
- a) Parasitic food chain
 - b) Grassland ecosystem
 - c) Forest ecosystem
 - d) Lake ecosystem
- 33) The primary producers in a forest ecosystem are-----
- a) Bacteria and other micro-organism
 - b) Carnivores
 - c) Herbivores
 - d) Chlorophyll containing trees and plants
- 34) The basic requirements/ needs of human beings are provided by-----
- a) Industrialisation
 - b) Agriculture
 - c) Nature
 - d) Urbanisation
- 35) The ozone layer is becoming thin due to the gas-----
- a) CO
 - b) CFCS
 - c) CO₂
 - d) NO₂
- 36) 'El Nino' this Phenomenon is associated with---
- a) Climate change
 - b) Air pollution
 - c) Water Pollution

- d) Radiation effect
- 37) The Environment (Protection) Act, 1986 was enacted for the ----- of environment.
- a) Protection and improvement
 - b) Law and enforcement
 - c) Management and economy
 - d) Health and regulation
- 38) Which of the following consider as values of Biodiversity?
- a) Consumptive
 - b) Social
 - c) Productive
 - d) All of the above
- 39) Soil erosion removes surface soil which contains-----
- a) Sand
 - b) Parental rock
 - c) Organic matter
 - d) Smoke and dust
- 40) Following is example of National Park in India----
- a) Kaziranga from Assam
 - b) Nanda Devi from Uttarakhand
 - c) Anamalai area from Tamil Nadu
 - d) None of the above
- 41) The most important human activity, leading to the extinction of wildlife, is
- a) Pollution in wildlife
 - b) Hunting for valuable wildlife products
 - c) Alternation and destruction of the natural habitats
 - d) Introduction of alien species
- 42) The food chain starts with dead organic matter is-----
- a) Detritus food chain
 - b) Grazing food chain
 - c) Uniform food chain
 - d) None of the above
- 43) Energy Flow in Ecosystem is -----
- a) Unidirectional
 - b) Lateral
 - c) Bilateral
 - d) None of the above
- 44) Noise pollution limits at residential area in night time is

- a) 45 dB
- b) 85 dB
- c) 55 dB
- d) 25 dB

45) The surface area from which runs off rainwater is collected is called ----

- a) Rainwater Harvesting
- b) Catchment Area
- c) Water establishment
- d) None of the above

46) A poisonous gas given out of a vehicle exhaust is

- a) Methane
- b) Ethane
- c) Carbon dioxide
- d) Carbon monoxide

47) Noise is measured using sound meter and the unit is-----

- a) Hertz
- b) Kilogram
- c) Joule
- d) Decibel

48) Ecotone means -----.

- a) Zone of least density in a community
- b) Zone of transition between two communities
- c) Zone of maximum diversity in a community
- d) Zone of highest density in a community

49) Which of the following effect is responsible for Global Warming?

- a) Radioactive effect
- b) Greenhouse effect
- c) Solar effect
- d) None of the above

50). Following is example is Ex-situ Conservation

- a) Zoos
- b) National parks
- c) Wildlife sanctuaries
- d) Biosphere reserves

51). The objective of Environment studies is ----

- a) Raise consciousness about environment problems
- b) To teach environmentally appropriate steps
- c) Create environmental problem awareness

d) All of the above

52.) What percentage of its geographical area of a country should be under forest cover?

a) 23%

b) 33%

c) 43%

Q2) Answer any three from following

(3 x 5marks)

- 1) Write difference between renewable and non renewable energy resources.
- 2) Explain single channel layer model with suitable diagram?
- 3) Define natural resources & add a note on non-renewable resources?
- 4) Explain details about Mineral resources.
- 5) Write note on ecological pyramids of Biomass.
- 6) Explain effects of floods and droughts.
- 7) Describe advantages and disadvantages of dams.
- 8) Explain Energy flow in the ecosystem briefly.
- 9) Briefly explain water harvesting and watershed management.
- 10) Describe the structure of pond ecosystem.
- 11) What are the causes of marine pollution?
- 12) Define deforestation and list causes of deforestation
- 13) Explain food chain and food web.
- 14) Briefly explain ecosystem and environment.
- 15) Define soil erosion and list the causes.
- 16) Explain genetic, species and ecosystem diversity with examples.
- 17) Discuss environmental ethics and resource use.
- 18) Describe noise pollution and measures to reduce it.
- 19) Discuss ozone layer depletion.
- 20) What is Eutrophication and its causes?
- 21) Briefly describe the values of biodiversity with necessary examples.
- 22) Discuss the threats to bio-diversity.
- 23) Write briefly about solar energy.
- 24) Explain brief about The Environmental (Protection) Act 1986.
- 25) Explain the need of public awareness in environment

Q3. Write Short note on any three

(Each for 5marks)

1. Thermal pollution
2. Biomass energy
3. Environment
4. Man- wildlife conflicts
5. Food web
6. Tidal energy
7. Genetic diversity
8. Food Chain

9. Industrial wastes
10. Climate change
11. Desert ecosystem
12. Noise pollution
13. Population growth
14. Detritus food chain and Grazing food chain
15. Forest resources
16. Ozone layer depletion
17. Autotrophs
18. Soil pollution
19. Marine pollution
20. Habitat loss
21. Ecosystem diversity
22. Biodiversity hotspot
23. Mitigation of pollution due to mining
24. Wastewater pollution
25. Ex-situ conservation
26. Deforestation

Q 4, Q 5 & Q 6 Long answer questions

(Each for 10 Marks)

- Q1. Define ecosystem and describe components of the ecosystem of small fresh Water pond.
- Q2. Define food chain, food web and ecological pyramids with suitable diagram and examples.
- Q3. Describe the various kinds of ecological pyramids with suitable diagram.
- Q4. List the functions of producers, consumers and decomposers in an ecosystem with examples.
- Q5. Give an account of Ecological succession with regarding to causes and types.
- Q6. Explain World food problem and note on effect of modern agriculture practice on environment.
- Q7. Describe the threats to biodiversity and the various methods used in the Conservation of Biodiversity.
- Q8. Write about Biodiversity Hot spots and explain detail about Western Ghats.
- Q9. Explain in detail definition, causes, effects and control measures of Air pollution.

- Q10. Explain in detail definition, Causes, effects and control measures of water pollution.
- Q11. Explain in detail definition, Causes, effects and control measures of Soil pollution.
- Q12. Explain in detail definition, Causes, effects and control measures of Noise pollution.
- Q13. Explain in detail definition, Causes, effects and control measures of Marine pollution.
- Q14. Explain in detail Causes, effects and control measures of Thermal and Radioactive pollution.
- Q15. What is Solid waste Management? Explain its Causes, effects and control measures.
- Q16. Briefly describe the different methods of water conservation and watershed Management.
- Q17. What is disaster management? Explain with floods and earthquake.
- Q18. Explain in detail Air (Prevention and Control of Pollution) Act
- Q19. Explain in detail Water (Prevention and control of Pollution) Act
- Q20. Explain in detail Wildlife Protection Act.
- Q21. Define Environment & explain its importance as multidisciplinary subject.
- Q22. What is desertification phenomenon and add note on Desert ecosystem and grassland ecosystem.
- Q23. Briefly discuss the various types of terrestrial and aquatic ecosystem.
- Q24. What are urban problems related to energy?add note on rain water harvesting.
- Q25. What is disaster management? Explain with cyclone/ tsunami or landslides.
- Q26. Discuss the causes, effects and control measures of solid waste.
- Q27. Define the different types of ecosystems and describe their characteristics briefly.
- Q28. What Single-channel energy model? Explain Producers, Consumers and Decomposers-Details with examples.
- Q29. What are the roles of an individual in the prevention of pollution? Explain your Point of views and control measures .
- Q30. Explain population explosion and its impact and control measures.