

USN

Question Paper Version : A

Fifth Semester B.E./B.Tech. Degree Examination, Dec.2023/Jan.2024

Environmental Studies

(COMMON TO ALL BRANCHES)

Time: 2 hrs.]

[Max. Marks: 100

INSTRUCTIONS TO THE CANDIDATES

1. Answer all the hundred questions, each question carries one mark.
2. Use only **Black ball point pen** for writing / darkening the circles.
3. **For each question, after selecting your answer, darken the appropriate circle corresponding to the same question number on the OMR sheet.**
4. Darkening two circles for the same question makes the answer invalid.
5. **Damaging/overwriting, using whiteners** on the **OMR** sheets are strictly prohibited.

1. The term 'Environment' has been derived from French word which means to encircle or surround
a) Environ b) Oikos c) geo d) Aqua
2. Which of the following components of the Environment are effective transport of matter
a) Atmosphere and Hydrosphere b) Atmosphere and Lithosphere
c) Hydrosphere and Lithosphere d) Biosphere and Lithosphere
3. A _____ is step in Food chain.
a) Community b) Biosphere c) Food web d) Tropical level
4. In an eco – system biological cycling of material is maintained by
a) Producers b) Consumers c) Decomposer d) All of these
5. Which pyramid is always upright?
a) Energy b) Biomass c) Number d) Food chain
6. The largest reservoir of nitrogen in our planet is
a) Ocean b) Atmosphere c) Biosphere d) Fossil fuel
7. Earth day is held every year on
a) June 5th b) July 23rd c) April 22nd d) May 1st
8. Invasive species change
a) Nutrient availability b) Water quality
c) Change water flow d) All of the above
9. Habitat may also fragmented by
a) Artificial process b) Natural process c) Global warming d) Sea water intrusion

10. How many acres of forest are destroyed every year?
a) 20 million acres b) 40 million acres c) 10 million acres d) 80 million acres
11. The wild life helps in
a) Balance of genetic makeup b) Balance of Nature
c) Balance of Life d) Balance of Evolution
12. Major reason for decline of species includes
a) Persecution by Man b) Pollution
c) Destruction of Natural habitat d) All of these
13. _____ should be established for protection of endangered species.
a) protected areas b) National park c) Sanctuaries d) All of these
14. Eutrofication is
a) an improved quality of water in lakes b) a process in carbon cycle
c) the result to accumulation of plant nutrient in water bodies
d) a water purification technique
15. A Food web consists of
a) a portion of a food chain
b) an organisms position with a food chain
c) interlocking of food chain
d) a set of similar consumers
16. Which of the following is the terrestrial ecosystem?
a) Forest b) Grass land c) Desert d) All of these
17. Primary Consumer
a) Herbivores b) Carnivores c) Macro consumers d) None of these
18. In an ecosystem, the flow of energy is
a) Bidirectional b) Cyclic c) Unidirectional d) Multidirectional
19. Million of oceanic birds are killed every year all over the World by
a) Hunting b) Oil spillage c) Pollution d) Deforestation
20. Environment is the life support system that includes.
a) Air b) Water c) Land d) All of these
21. Solar radiation consists of
a) uv b) visible light c) coal d) All of these
22. The most important fuel used by nuclear power plant is
a) u - 235 b) U - 238 c) u - 245 d) u - 220
23. Biogas is a mixture of gases consists of
a) Methane and CO₂ b) Butane and CO₂
c) Methane and Eathane d) None of these
24. Chernobyl nuclear disaster occurred in the year
a) 1984 b) 1980 c) 1982 d) 1986

25. Problems of Hydrogen fuel cell is
 a) Storage and distribution b) Creates pollution
 c) Availability of hydrogen d) None of these
26. Which place in India the tidal energy has been experimented?
 a) Goa b) Gujarat c) Kerela d) Andra Pradesh
27. Harvesting the wind energy is done by
 a) Wind mill b) Tide mill c) Flour mill d) Ball mill
28. Hydrogen energy can be trapped through
 a) Batteries b) Fuel cells c) Photovoltaic cells d) Gasifiers
29. Nuclear Fusion uses the following as a fuel
 a) Carbon b) Helium c) Cadmium d) Water
30. Fossil fuel are converted into energy by
 a) Burning b) Cooling c) Sublimation d) Melling
31. Cow dung can be used
 a) as manure b) for production of Bio – gas
 c) as fuel d) all of the above
32. Molases from Sugar industry is used to generate
 a) Bio diesel b) Hydrogen c) Bioethonal d) Bio methanol
33. Mining means
 a) to conserve minerals b) to check pollution
 c) to extract minerals and ores d) None of these
34. The desert among the following is not a cold desert.
 a) Gobi desert b) Atacama desert c) Mojave desert d) Patagonian desert
35. Forest rich area in Karnataka is found in
 a) Western ghats area b) Bandipur area
 c) Nagarahole area d) Sandur area
36. Over grazing results in
 a) Soil erosion b) Productive soil
 c) Increase of soil nutrients d) all of the above
37. India has the largest share of which of the following
 a) Manganese b) Mica c) Copper d) Bauxite
38. The expansion of OTEC
 a) Ocean Thermal Energy Conversion
 b) Ocean Tidal Energy Conversion
 c) Ocean Tidal Energy Corporation
 d) None of these
39. For Clour seeding _____ chemical used
 a) Silver Iodide b) Potassium Iodide c) Copper Sulphate d) Potassium sulphate

40. The slow process of conversion of dead vegetation into coal is called ____
a) Decomposition b) Evolution c) Carbonification d) Carbonisation
41. The World most abundant fossil fuel is ____
a) Bio diesel b) Coal c) Oil d) Methane gas
42. In Industries, the most polluted source of wastewater is from ____
a) Process b) Utility c) Toilets d) Kitchen
43. ____ indicates physical characteristics of Industrial wastewater.
a) Colour b) Solids c) Temperature d) All of these
44. In aquatic ecosystem phytoplankton can be considered as a
a) Consumers b) Macro consumers c) Producers d) Decomposers
45. Agriculture revolution began in
a) 20th century b) 19th century c) 18th century d) None of these
46. What is the maximum allowable concentration of fluorides in drinking water?
a) 1.0 mg/l b) 1.25 mg/l c) 1.5 mg/l d) 1.75 mg/l
47. Percentage of methane content in biogas
a) 60% b) 50% c) 70% d) 80%
48. Pesticide cause
a) eye irritation b) skin irritation c) respiratory ailments d) all of these
49. Bhopal gas Tragedy was caused due to leakage of
a) MIC b) SO₂ c) CO₂ d) CH₄
50. Excess of Nitrates in drinking water is likely to cause
a) Fluorosis b) Minamata
c) Blue baby syndrome d) None of these
51. Geothermal Energy is a
a) Heat Energy b) Current Energy c) Wind Energy d) Solar Energy
52. The depletion of trees is causing accumulation of
a) NO₂ b) SO₂ c) O₂ d) CO₂
53. The ground water depends on
a) Geological formation b) Amount of Rainfall
c) Run off d) All the above
54. Which of the following element make e – waste hazardous in nature?
a) Lead b) Glass c) Plastic d) Iron
55. According to the Comptroller and Auditor General's (CAG) report what is the amount of e – waste generated annually?
a) 4 LT b) 5 LT c) 6 LT d) 7 LT

56. What is the hazardous pollutant released from batteries?
a) Arsenic b) Barium c) Cobalt d) Cadmium
57. What is the main purpose of hazard identification?
a) To minimize the effect of a consequence
b) For better risk management
c) To characterize adverse effect of toxins
d) To reduce probability of occurrence
58. Discharge of Industrial waste cause
a) Depletion of DO b) Destroy aquatic life
c) Impair biological activity d) All of these
59. The ideal of sustainable development was defined for the first time by the World Commission on Environment and development in the year.
a) 1985 b) 1986 c) 1987 d) 1988
60. Anthropogenical activities means
a) Human activities b) Natural activities
c) Bacteriological activities d) Wild animal activities
61. Sustainable development
a) Encourages Environmentally Economic growth
b) Minimizing depletion of Non – renewable resources
c) Using sustainable practices for managing renewable resources
d) All the above
62. Estuary means
a) Rich in nutrients b) Treatment of water
c) End point of the river d) Meeting place of river and sea
63. As per BIS, the permissible limit of pH value for drinking water
a) 6.5 to 7.5 b) 7.0 c) 6.5 to 8.5 d) 6.0 to 8.5
64. The maximum allowable concentration of Iron content in drinking water.
a) 0.3 mg/l b) 1.0 mg/l c) 1.5 mg/l d) 2.0 mg/l
65. Cholera and Typhoid are caused by
a) Virus b) Fungus c) Bacteria d) Algae
66. Major source of Fluoride available is
a) River water b) Food product c) Lake d) Plants
67. Liquefied petroleum gas is a mixture of
a) Propane and Butane b) Methane and Propane
c) Methane and Butane d) Methane and Ethane
68. The Air pollutant which causes severe damage to plant even at much lower concentration is _____
a) Peroxyl Nitrate b) Ozone c) CO₂ d) Fluorine

69. Noise pollution means
a) Loud sound
b) Unwanted sound
c) High frequency sound
d) Environmental pollution
70. Noise pollution limit in Industrial area is
a) 65 dB
b) 80 dB
c) 95 dB
d) 100 dB
71. Global warming means
a) Increase in Earth body temperature
b) Acid rain
c) Increase in Solar radiation
d) All of these
72. Acid rain are more prominent in
a) Arid regions
b) Tropical regions
c) Temperate regions
d) Equally prominent in all
73. Ozone layer thickness is measured in
a) PPM
b) PPB
c) Decibels
d) Dobson units
74. Freon's are
a) HFC
b) CFC
c) NFC
d) Hydrocarbons
75. Ozone depletion causes
a) Acid rain
b) Vomiting
c) Cancer
d) None of these
76. The pH of acid rain is
a) 4.0
b) 7.0
c) 6.0
d) 6.5
77. Underground tanks seen in Rajasthan to store rain water for drinking is called
a) Tankas
b) Khadin
c) Ponds
d) Kuls
78. Ozone hole was first discovered over
a) Arctic
b) Antarctica
c) Tropical region
d) Africa
79. Reduction in brightness of the famous Taj Mahal is due to
a) Global warming
b) Air pollution
c) Ozone depletion
d) Afforestation
80. Which of the following is a biodegradable pollutant
a) DDT
b) Asbestos
c) Sewage
d) Mercury
81. Unit for Noise measurement
a) Decibel
b) Giga byte
c) Mega byte
d) Freon's
82. 1980, Indian Forest Act deals with
a) National Forest Policy
b) Restriction on hunting
c) Establishment of Sanctuaries
d) All the above
83. 1948, Indian Factories Act
a) Protection to workers at work place
b) Salary
c) Housing
d) Monitoring station

84. The Karnataka State Pollution Control Board [KSPCB] was established in the year
a) 1982 b) 1974 c) 1986 d) 1976
85. Environmental protection is the responsibility of
a) Govt. of India b) NGO's c) Individual d) All of these
86. The leader of Chipko movement is
a) Sunderal Bahuguna b) Medha Patkar
c) Vandana Shiva d) Suresh Heblikar
87. Carona virus originated from
a) Wuhan city b) Vienna c) Kyoto d) Paris
88. GIS receives data from
a) Existing maps b) GPS
c) Remote sensing data d) All of these
89. LANDSAT is a
a) Satellite b) Aircraft
c) Satellite Launching station d) None of these
90. The Wild Life Protection Act was enacted in the year
a) 1986 b) 1974 c) 1994 d) 1972
91. EIA means
a) Environment Impact Assessment
b) Environment Integrity Assessment
c) Ecological Impact Assessment
d) Environment Impact Application
92. ISO 14001 deals with
a) Pollution Management
b) Risk Management
c) Environment Management
d) None of these
93. The First International Earth Summit was held at
a) Johannesburg b) Rio de Janeiro c) Kyoto d) Stockholm
94. Environment Protection is the Fundamental duties of the Citizen of India under the Article
a) 51 – A(g) b) 48 – A c) 47 d) 21
95. Which of the following is NGO
a) Narmada Bacho Andolan b) CPCB
c) WHO d) None of these
96. An important NGO involved in Global Environmental Protection is
a) Control Pollution b) Encourage construction
c) Green peace d) None of these

97. Remote sensing can be used for
a) Land use pattern
b) Agriculture field data
c) Detection of forest fire
d) All of these
98. The concept of 'Carbon Credit' originated from
a) Rio de Janerio
b) Kyto protocol
c) Montreal protocol
d) None of these
99. Disaster Management includes
a) Disaster response
b) Disaster preparedness
c) Disaster mitigation
d) All of the these
100. GIS means
a) Geographic Information System
b) Geological Information System
c) Geographical Integrity System
d) Geographical Integrity System
