

**ENVIRONMENTAL STUDIES**

1. The term Environment has been derived from the French word which means to encircle or surround  
a) **Environ**                      b) Oikos                      c) Geo                      d) Aqua
2. The term environment was introduced by  
a) Jacob Van Verkul    b) Tyler Miller                      c) Gilbertson                      d) **Eugene P Odum**
3. Environment is the life support system that includes  
a) Air                      b) Water                      c) Land                      d) **All of the above**
4. The objective of environmental education is  
a) Raise consciousness about environmental conditions  
b) To teach environmentally appropriate behavior  
c) Create an environmental ethic                      d) **All of the above**
5. Which of the following conceptual spheres of the environment is having the least storage capacity for matter?  
a) **Atmosphere**                      b) Lithosphere                      c) Hydrosphere                      d) Biosphere
6. Which of the following components of the environment are effective transporters of matter?  
a) Atmosphere and Hydrosphere                      b) Atmosphere and Lithosphere  
c) **Hydrosphere and Lithosphere**                      d) Biosphere and Lithosphere
7. Amount of CO<sub>2</sub> content in atmospheric air is normally  
a) 0.21%                      b) 0.416%                      c) **0.318%**                      d) 0.428%
8. About.....% of the earth is covered by water  
a) 53%                      b) 19%                      c) **71%**                      d) 33%
9. Percentage of fresh water available on earth is  
a) **2.8 %**                      b) 2.2%                      c) 0.6 %                      d) 2.15 %
10. Among fresh water availability on earth, the percentage of groundwater is about  
a) 0.2%                      b) 0.5%                      c) **0.8%**                      d) 1.0%
11. The rain forms represented by snow, dew, fog and mist is known as  
a) Dry deposition                      b) **wet deposition**                      c) acid rain                      d) none
12. The temperature in the stratosphere ranges between  
a) 25<sup>0</sup> C to 55<sup>0</sup> C                      b) **-56<sup>0</sup> C to -2<sup>0</sup> C**                      c) 10<sup>0</sup> C to -5<sup>0</sup> C                      d) none
13. Troposphere mainly consists of  
a) CO<sub>2</sub>                      b) H<sub>2</sub>                      c) O<sub>3</sub>                      d) **O<sub>2</sub> and N<sub>2</sub>**
14. The volume of nitrogen present in the troposphere is  
a) 85%                      b) **78%**                      c) 21%                      d) 5%
15. Inverse condition is the  
a) **Increase in temperature with altitude**                      b) Decrease in temperature with altitude  
c) Increase in temperature with latitude                      d) Decrease in temperature with latitude
16. Carbon content is higher (19.4%) in  
a) Soil                      b) atmosphere                      c) water                      d) **living matter**
17. Atmosphere consists of 79 per cent Nitrogen and 21 per cent Oxygen by  
a) **Volume**                      b) Weight                      c) Density                      d) All the three
18. The major atmospheric gas layer in stratosphere

- Hydrogen   b) Carbon dioxide   c) **Ozone**   d) Helium
19. UV-C radiation lies in the region  
 a) 0-100 nm   b) **100-280 nm**   c) 280-315nm   d) 315-400 nm
20. Which atmospheric sphere is closest to the earth surface?  
 a) **Troposphere**   b) Stratosphere   c) Mesosphere   d) Exosphere
21. The largest reservoir of nitrogen in our planet is  
 a) Oceans   b) **Atmosphere**   c) biosphere   d) Fossil fuels
22. Which among the components is termed as a life zone on the earth?  
 a) Atmosphere   b) Hydrosphere   c) **Biosphere**   d) Stratosphere
23. Biosphere is  
 a) The solid shell of inorganic materials or the surface of the earth  
 b) **The thin Shell of organic matter on the surface of earth comprising of all the living things**  
 c) The sphere which occupies the maximum volume of all the spheres  
 d) All of the above
24. Loss of water content through plants into atmosphere is called  
 a) Evaporation   b) **Transpiration**   c) Vaporization   d) Hydraulic cycle
25. Which of the following is absorbed by green plants from the atmosphere?  
 a) **Carbon dioxide**   b) Water   c) Nutrients   d) All of above
26. The word Ecology is proposed by  
 a) **Ernst Haeckel**   b) Helena Curtis   c) Charles Southwick   d) Charles Alton
27. The science that deals with the relationship of various organisms with their environment is known as  
 a) economics   b) geology   c) **ecology**   d) anthropology
28. Habitat refers to  
 a) Physical conditions of the place where organisms live   c) **Both a & b**  
 b) Chemical conditions of the place where organisms live   d) None of the above
29. Which of the following is a biotic component of an ecosystem?  
 a) **Fungi**   b) Solar light   c) Temperature   d) Humidity
30. In an ecosystem, the flow of energy is  
 a) Bi-directional   b) Cyclic   c) **Unidirectional**   d) Multidirectional
31. Which Pyramid is always upright?  
 a) **Energy**   b) Biomass   c) Producers   d) Food chain
32. The organisms who directly feed on producers are called  
 a) **Herbivores**   b) Carnivores   c) Decomposers   d) Saprophytes
33. The sequence of eating and being eaten in an ecosystem is called  
 a) **Food Chain**   b) Carbon cycle   c) Hydrological cycle   d) Anthropogenic system
34. Which of the below is a producer in an ecosystem?  
 a) **Plants and some bacteria capable of producing their own food**  
 b) Animals   c) Human beings   d) Fish
35. In aquatic ecosystem phytoplankton can be considered as a  
 a) Consumer   b) **Producer**   c) Saprophytic organisms   d) Macro consumer
36. The basic requirements of human beings are provided by

- a) Industrialization      b) Agriculture      c) **Nature**      d) Urbanization
37. In an ecosystem biological cycling of materials is maintained by  
a) Producer      b) Consumer      c) Decomposer      d) **All of the above**
38. Organisms which feed directly or indirectly on producers are called  
a) Prey      b) **Consumers**      c) Decomposers      d) Detritus
39. The primary producers in a forest ecosystem are  
a) **Chlorophyll containing trees and plants**      b) Herbivores  
c) Carnivores      d) Bacteria and other micro-organisms
40. Abiotic components include  
a) Soil      b) Temperatures      c) Water      d) **All the above**
41. Which of the following is true?  
a) **Green plants are self nourishing**      b) Producers depends on consumers  
c) Biotic components includes all nonliving components      d) Herbivores depend on Carnivores
42. A predator is  
a) An animal that is fed upon      b) **An animal that feeds upon another animal**  
c) Animal that feeds upon both plants and animals      d) A primary consumer
43. Which among the following is a climatic factor?  
a) Pressure      b) Humidity      c) Temperature      d) **All of the above**
44. Which of the following is the terrestrial ecosystem?  
a) Forest      b) Grass land      c) Desert      d) **All of the above**
45. Ecological pyramids are studies of  
a) Pyramid of numbers      b) Pyramid of biomass      c) Pyramid of energy      d) **All of the above**
46. Factors responsible for balanced ecosystem are  
a) Balance between predator and prey      b) Balance between vegetation, herbivores and carnivorous  
c) Balance between competing species and biotic factors      d) **All of the above**
47. A food web consists of  
a) A portion of a food chain      b) an organisms position in a food chain  
c) **Interlocking food chains**      d) a set of similar consumers
48. Which of the following statements are true?  
a) Man is not dependent on nature  
b) Resources are unlimited, so one can use them as per ones wish  
c) **Energy can be convened from one form to another, but some percentage is lost into the Environment**  
d) Matter can be generated afresh. It need not be recycled or reused.
49. Which of the following is not a desirous chemical in a good habitat?  
a) Oxygen      b) Carbon di-oxide      c) **Sulphur di-oxide**      d) Nutrients
50. An ecosystem is a region in which  
a) Dead organism interact with their environment      c) **Living organism interact with their environment**  
b) Living organism do not interact with their environment      d) All these
51. The perfect equilibrium existing in the biosphere between the various organisms is known as  
a) Environmental balance      b) **Ecological Balance**      c) Ecological cycle      d) None of these

52. The term ecosystem was first proposed by  
a) Jacob Van Verkul                      b) **A.G. Tansley**                      c) Costana                      d) Marie Gibbs
53. The two major components of ecosystem are  
a) Adiabatic & isotropic                      b) Ecological & climatological  
c) Cyclic & biologic                      d) **Abiotic & biotic**
54. Biotic components include  
a) **All living organisms**                      b) Water, minerals and gases  
c) Self-nourishing green plants                      d) Light, temperature, etc
55. Food chain is divided into \_\_\_\_\_ basic categories  
a) Four                      b) **Three**                      c) Five                      d) Seven
56. The transfer of energy and nutrients from one feeding group of organisms to another in a series is called  
a) Energy chain                      b) **Food chain**                      c) Balanced ecosystem                      d) Food web
57. A simple food chain starts with  
a) **green plants**                      b) waste of organisms and dead organisms  
c) both of these                      d) none of these
58. In a food chain humans are  
a) Primary consumers                      b) Secondary consumers  
c) **Primary and secondary consumers**                      d) Producers
59. Tendency of pollutants to become concentrated in successive trophic levels is known as  
a) Bioremediation                      b) **Biomagnifications**                      c) Biopiracy                      d) Biorhythm
60. Social security is one of the most important programs providing benefits to  
a) Worker/employee                      b) Un-employed                      c) Families of deceased                      d) **All of these**
61. Anthropological activities means  
a) Natural activities                      b) Bacterial activities                      c) Wild animal activities                      d) **Human activities**
62. Which of the following conditions must be fulfilled to ensure food security?  
a) Food must be available                      b) Each person must have access to it  
c) Food utilized/consumed must fulfill nutritional requirements.                      d) **all of the above**
63. Economic security is measured on the basis of  
a) Income                      b) Labour market and Employment                      c) Work, Job and Skills                      d) **All of the above**
64. Socio-economic security in environmental aspects involves  
a) Fairness & equity in distribution costs for complete existing generation  
b) Welfare of the present generation  
c) Intra and inter generational equity of resources                      d) **All of the above**
65. The government of India adopted the National Housing Habitat policy in  
a) **1998**                      b) 1999                      c) 2000                      d) 2001
66. Agricultural revolution began  
a) **1000 – 2000 years ago**                      b) 1 million years ago  
c) 30000 – 50000 years ago                      d) 10000 – 20000 years ago
67. Intensive agriculture led to deposition of excessive quantity of ..... into aquatic and terrestrial ecosystem.  
a) **Nitrogen**                      b) Phosphorus                      c) Sulphur                      d) None
68. Engineering intervention for flood control, which does not alter the characteristics of river ecosystem is  
a) Construction of Dam reservoir                      b) **Construction of levees**

c) Channelization

d) Construction of retention ponds

69. Which of the following in agriculture does not produce negative effect on environment?

- a) High salinity      **b) release of SO<sub>2</sub>**      c) water logging      d) loss of soil fertility

70. Which of the following is not caused by the use of fertilizers in agriculture?

- a) Methemoglobinemia      b) Eutrophication      c) Acidification and Salinity of Soils      **d) None**

71. Application of pesticides has increased the food production by

- a) 10 fold**      b) 50 fold      c) 100 fold      d) none

72. Pesticide causes

- a) Eye irritation      b) Skin irritation      c) Respiratory ailments      **d) All these**

73. Increased use of pesticides causes

- a) genetic damage      b) genetic resistance      **c) both a and b**      d) none

74. Eutrophication is

- a) an improved quality of water in lakes      b) a process in carbon cycle  
**c) the result to accumulation of plant nutrients in water bodies**      d) a water purification technique

75. Major purpose of most of the Dams around the world is

- a) Power generation      b) Drinking water supply      c) Flood control      **d) irrigation**

76. Which of the following is the most environmental friendly agriculture practice?

- a) Using chemical fertilizers      b) Using insecticides      **c) Organic farming**      d) None of the above

77. The adverse effect of modern agriculture is

- a) Water pollution      b) Soil degradation      c) Water logging      **d) All of the above**

78. Soil erosion removes surface soil which contains

- a) Organic matter      b) Plant nutrients      **c) Both a and b**      d) None of the above

79. Water logging is a phenomenon in which

- a) Crop patterns are rotated      **b) Soil root zone becomes saturated due to over irrigation**  
c) Erosion of soil      d) None of the above

80. The Impact of construction of dams

- a) Submerges forest      b) Loss of wild life habitat      c) Damages downstream ecosystem  
**d) All of the above**

81. Which of the following statement is false?

- a) Soil erosion effects productivity of agriculture fields  
b) It takes 300 years for one inch of agricultural top soil to fill  
c) the amount of erosion depends on soil type, slope, drainage pattern and crop management.  
**d) soil erosion helps to retain water and nutrients in the root zone**

82. Which of the following is true?

- a) Surface runoff does not carry pesticides into streams  
**b) water percolating downward through agriculture lands carries with it dissolved chemicals and contaminates ground water**  
c) Present agricultural practice does not contaminate water      d) None of the above

83. Farmers have a tendency to

- a) Use optimum quantity of water      **b) To over irrigate their crops**  
c) To conserve water      d) All of the above

84. Organic Farming is

- a) Farming without using pesticides and chemical fertilizers**      b) Enhances bio-diversity

- c) Promotes soil biological activity d) All of the above

85. Which of the following are major environmental issues involved in agriculture?

- a) Air pollution from dust b) Water pollution c) **Soil degradation** d) None

86. Effect of modern agriculture on soil is due to

- a) Erosion b) Acidification c) Salinization d) **All**

87. During the last 30 years, the percentage decrease in agricultural land due to urbanization is about

- a) 40% b) 60% c) **30%** d) 0%

88. The main impact of urbanization on plant and animal life is

- a) Increase in species b) Mutation in species c) Both a & b d) **Loss of species**

89. Urban solid waste is known as

- a) garbage b) rubbish c) refuse d) **all**

90. Which of the following is the ill- effect of urbanization?

- a) Decrease in agriculture land b) Loss of greener c) Loss of water bodies d) **All these**

91. Ecosystem is disturbed by housing activity because

- a) **Large volume of raw materials like brick, stone, timber, cement, steel plastic etc are required to be produced** b) Housing is required to provide shelter to growing population  
c) Majority of housing projects are concentrated in cities only  
d) Standard of living is increased by modern houses

92. Major problem/s due to industrialization is /are

- a) Urbanization b) Migration of people c) Development of slums d) **All these**

93. Which of the following is not the environmental effect of industrialization in general?

- a) Solid waste b) Water pollution c) Air pollution d) **Economics**

94. Sulphur dioxide is used in

- a) Paper manufacture b) Textile manufacture c) **Processing of fossil fuels** d) Both (a) and (b)

95. The most important remedy to avoid negative impact due to industrialization is

- a) Industry should be closed b) Don't allow new industrial units

c) **Industry should treat all the wastes generated by it before disposal**

d) Industries should be shifted far away from human habitats.

96. Bhopal gas tragedy occurred in the year

- a) 1974 b) **1984** c) 1994 d) 1979

97. Bhopal Gas Tragedy caused due to leakage of

- a) **Methyl Iso Cyanate (MIC)** b) Sulphur dioxide c) Mustard gas d) Methane

98. Mining means

- a) To conserve & preserve minerals b) to check pollution due to mineral resources  
c) **To extract minerals and ores** d) None

99. Mining of ores is done by

- a) sub-surface mining b) tunneling c) only sub-surface mining d) **both a and b**

100. Environmental impact of mining

- a) Brings order into social setup b) **Devastation of ecosystem**  
c) Present mining activity is a sustainable development  
d) Mining has no adverse effect on ecosystem as it is located in remote areas

101. Mining practices lead to  
a) Population growth   b) Rapid urbanization   c) **Loss of grazing and fertile land**   d) None of these
102. Which of the following are major environmental issues involved in mining activity?  
a) Air pollution and dust   b) Water pollution   c) Soil degradation   d) **All these**
103. The type of mass movement characterized by a slow and gradual down slope movement is known as  
a) Rock-fill   b) Mud flow   c) **Creep**   d) Landslide
104. In order to protect the health of people living along the adjoining areas of roads, one should.  
a) **Plant trees alongside of the roads**   b) Not allow diesel driven vehicles  
c) Shift them (people) to other places   d) None of the above
105. The pollution caused by transportation/ vehicular activities depends on  
a) Type of the vehicles engine   b) Age of the vehicle   c) Traffic congestion   d) **All of the above**
106. E.I.A can be expanded as  
a) Environment & Industrial Act   b) Environment & Impact Activities  
c) **Environmental Impact Assessment**   d) Environmentally Important Activity
107. E.I.A is related to  
a) Resource conservation   b) Efficient equipment/process  
c) Waste minimization   d) **All of the above**
108. Environmental impact assessment  
a) is a study of feasibility of a project  
b) is a study of bio-physical characteristics of the environment that may result from a human action  
c) **Both a and b**   d) None of the above
109. EIA study will help  
a) **Maximizing the benefits without overloading the planets ecosystem**  
b) To estimate the future needs of the society   c) To smooth implementation of the project  
d) To cope up with rapid growth of population
110. Sustainable development  
a) Discourages environmentally economic growth   b) **Encourages environmentally economic growth**  
c) Encourages environmentally harmful and unsustainable forms of economic growth  
d) All the above
111. Sustainable development will not aim at  
a) Socio- economic development, which optimizes the economic and social benefits available in the present, without spoiling the likely potential for similar benefits in the future  
b) Reasonable and equitably distributed level of economic well being that can be perpetuated continually  
c) Development that meets the needs of the present without compromising the ability of future generations to meet their own needs  
d) **Maximizing the present day benefits through increased resource consumption**
112. Sustainability requires  
a) Conservation of resources   b) Minimizing depletion of non-renewable resources  
c) Using sustainable practices for managing renewable resources   d) **All the above**
113. The idea of sustainable development was defined for the first time by the world commission on economic development  
a) 1985   b) **1987**   c) 1989   d) 1991
114. Sustainable development means



- a) Meeting present needs without compromising on the future needs

- b) Progress in human well beings.  
 c). Balance between human needs and the ability of Earth to provide the resources, d) **All the above**

**115.** What would you do to prevent environmental damage?

- a) Plant trees b) Halt deforestation c) Control pollution d) **All of the above**

## **MODULE-II**

1. About \_\_\_\_\_% of the earth's surface is covered by water  
 a) 53% b) 19% c) **71%** d) 90%
2. The average annual per capita energy supply of fresh water available in the world is about  
 a) **1700 m<sup>3</sup>** b) 7200 m<sup>3</sup> c) 19600 m<sup>3</sup> d) 2700 m<sup>3</sup>
3. The oceans are the largest storage of water on earth containing:  
 a) 95% of earth's water b) 85% of earth's water  
 c) **97% of earth's water** d) 75% of earth's water
4. Among the fresh water available in the earth, the percentage of surface water is about  
 a) 50% b) 10% c) 5% d) **less than 1%**
5. What is the percentage of fresh water available in lakes and streams?  
 a) 0.0001% b) 0.001% c) **0.01%** d) 0.1%
6. Hydraulic cycle is related to  
 a) **Water cycle and balance** b) Water and electricity  
 c) water characterization d) Hydropower
7. **The surface water resources of India is estimated as**  
 a) **400 million hectare meters** b) **600 million hectare meters**  
 c) **100 million hectare meters** d) **4000 million hectare meters**
8. Water used for irrigation of food crops, fodder crops and medical herbs is known as  
 a) **Consumptive use** b) Commercial use c) Productive use d) Auxiliary use
9. Which of the following is not a part of the hydrological cycle?  
 a) Precipitation b) Infiltration c) Transpiration d) **Perspiration**
10. The ground water availability depends on  
 a) Amount of rain fall b) Geological formations c) Run off d) **All of the above**
11. In India ground water is rich in  
 a) Plains of rivers Kaveri and Krishna b) The plains of Netravati and Kapila  
 c) **The Gangetic plains** d) The Deccan plateau
12. Surface runoff can be stored in  
 a) ponds b) reservoirs c) **both a and b** d) none
13. Which among the following is a perennial river  
 a) **Mahanadi** b) Penner c) Narmada d) Tapti
14. Water supply for domestic consumption in Indian towns as per BIS  
 a) 150 lpcd b) 120 lpcd c) **135 lpcd** d) 200 lpcd
15. Water quality involves measuring the number of colonies of  
 a) **Coliform bacteria** b) Protozoa c) Cells d) Chromosomes
16. Blue baby syndrome (methaemoglobinemia) is caused by the contamination of water due to

- a) Phosphates                      b) Sulphates                      c) Arsenic                      d) **Nitrates**
17. Excessive Nitrates (above 45 mg/L) in drinking water causes  
a) Fever                      b) Cough & chill                      c) **Blue baby disease**                      d) Gastro Enteritis
18. Out of the following nutrients in fertilizer, which one causes minimum water pollution?  
a) Nitrogen                      b) Phosphorous                      c) **Potassium**                      d) Organic matter
19. What is the permissible range of pH for drinking waters as per the Indian Standards?  
a) 6 to 9                      b) 6.5 to 7.5                      c) 6 to 8.5                      d) **6.5 to 8.5**
20. Water without fluoride causes  
a) Corrosion                      b) **Dental cavities**                      c) Scale formation                      d) Tooth decay
21. Fluorosis is caused due to  
a) No fluoride intake                      b) **Excess fluoride intake**                      c) Low fluoride intake                      d) None of these
22. What is the maximum allowable concentration of fluorides in drinking water?  
a) 1.0 milligram per liter                      b) 1.25 milligram per liter  
c) **1.50 milligram per liter**                      d) 1.75 milligram per liter
23. Excess fluorides in drinking water is likely to cause  
a) Blue babies                      b) **Fluorosis**                      c) Taste and odor                      d) Intestinal irritation
24. Disfigurement in the teeth is caused by excessive amount of  
a) Mercury                      b) Nitrate                      c) **Fluoride**                      d) Lead
25. The organ of a baby usually damaged by lead poisoning is  
a) Kidney                      b) lungs                      c) **liver**                      d) heart
- 26. The per capita consumption of water for domestic purposes in USA is**  
**a) 300 liters                      b) 400 liters                      c) 250 liters                      d) 700 liters**
27. Maximum total hardness allowed in drinking water is  
a) **600 mg/L**                      b) 1000 mg/L                      c) 650 mg/L                      d) 750 mg/L
28. Temporary hardness of water is due to  
a) chloride hardness                      b) manganese hardness                      c) calcium hardness                      d) **carbonate hardness**
29. Excess of Iron in water is likely to cause  
a) hardness                      b) taste                      c) color                      d) **all**
30. The required Iron content in drinking water as specified by BIS is  
a) 300 mg/l                      b) 30 mg/l                      c) 3 mg/l                      d) **0.3 mg/l**
31. Important factor that causes water borne disease is  
a) Using contaminated sewage for irrigation  
b) Leaching of untreated fecal and urinary discharges into water bodies  
c) Discharge of industrial waste water                      d) By eating contaminated food
32. Cholera & typhoid are caused by  
a) Worms                      b) Virus                      c) **Bacteria**                      d) Fungus
33. Malaria is  
a) water borne disease                      b) **mosquito induced disease**                      c) both a and b                      d) none
34. Cholera is caused by the bacteria  
a) **Vibrio cholerae**                      b) Cholea salmonella

- c) *Treponema petagium cholerae* d) *Clostridium botulinum*
35. Hepatitis is caused by  
a) Protozoa **b) Virus** c) Bacteria d) Fungus
36. Typhoid, cholera are examples of  
a) Viral infection **b) Bacterial infection** c) Protozoan infection d) None of these
37. Control of water borne diseases can be achieved effectively by  
a) Treatment of disease b) By consuming mineral water  
**c) By proper treatment of waste water & protecting the source of water** d) By vaccination
38. Cholera, typhoid, Hepatitis-A and E are caused due to  
**a) Contaminated water** b) Solar radiation c) Radioactivity d) Electromagnetic radiation
39. Which one of the following disease is not a stage of arsenicosis?  
a) Malnutrition b) Diarrhoea c) Measles d) Chikungunya
40. Which one of the following disease is not a large scale children's mortality?  
a) Diffuse melanosis b) Keratosis c) Gangrene and skin cancer d) Chikungunya
41. In water treatment alum is used for  
a) softening b) coagulation c) filtration d) disinfection
42. Aeration of water removes  
a) suspended solids b) dissolved gases c) dissolved salts d) none
43. The process of decomposing organic waste in the presence of air is called  
a) reduction b) oxidation c) incineration d) pulverizing
44. Biological treatment of sewage takes place in  
a) sedimentation chamber b) screening chamber c) grit chamber d) trickling filter
45. Facultative bacteria can exist in which type of environmental conditions  
a) Presence of oxygen b) Absence of Oxygen c) Both a & b d) None of these
46. Mineral is  
a) organic matter **b) naturally occurring inorganic substance** c) synthetic compound d) none
47. India has the largest shares of which of the following  
a) Manganese **b) Mica** c) Copper d) Diamond
48. Mineral resources are  
a) Renewable b) Available in plenty c) **Non renewable** d) Equally distributed
49. Deep deposits of minerals are removed by  
a) Surface mining **b) Subsurface mining** c) Open pit mining d) Dredging
50. Which of the following is not a natural mineral?  
a) Asbestos b) feldspar **c) Phosphate** d) Nitrogen
51. The earth's land surface covered by forest is about  
a) 1/4 b) 2/3 **c) 1/3** d) 1/5
52. Forest rich area in Karnataka is found in \_\_\_\_\_  
**a) Western Ghats** b) Bandipur c) Nagarhole d) Mangalore
53. \_\_\_\_\_ are referred to as Earth's lungs.  
**a) Forests** b) Carbon cycles c) Water sources d) Mines

54. Forests are effective sinks of  
**a) Oxygen**                      b) Carbon di-oxide                      c) Nitrogen oxides                      d) all
55. Mangroves are  
 a) desert plants                      b) high altitude plants  
**c) forest in tidal zones in equatorial and tropical coasts** d) none
56. Forests are extremely important because they  
 a) Provide clean water and clean air                      b) Provide habitat for wild life  
 c) Provide recreation and a change from the hectic urban                      **d) all of the above**
57. Deforestation means  
 a) Creation of new forest land for the wild life                      b) Planting trees in the cities  
 c) Conversion of forest land for agriculture/pasture/homes etc                      **d) Not managing the forest properly**
58. Deforestation means  
 a) Preservation of forests                      **b) destruction of forests**                      c) mono-crop cultivation                      d) agriculture
59. Deforestation can  
 a) Increase the rain fall                      b) Increase soil fertility                      **c) Introduce silt in the rivers** d) None of these
60. What percentage of its geographical area of a country should be under forest cover?  
 a) 23%                      b) 43%                      c) 13%                      **d) 33%**
61. Plants use.....gas for photosynthesis  
 a) Oxygen                      b) methane                      c) Nitrogen                      **d) Carbon dioxide**
62. Decreased soil fertility through rapid leaching of the essential mineral nutrients is due to  
 a) Reforestation                      b) Deforestation                      c) Over exploitation                      d) Recycling forest products
63. During photosynthesis, trees produce  
**a) Oxygen**                      b) Carbon dioxide                      c) Nitrogen                      d) Carbon Monoxide
64. Forests prevent soil erosion by binding soil particles in their  
 a) Stems                      **b) roots**                      c) leaves                      d) buds
65. Major causes of deforestation are  
 a) Shifting cultivation                      b) Fuel requirements                      c) Raw materials for industries                      **d) All of these**
66. The major carbon storage in the carbon cycle is  
 a) Rivers                      **b) Atmosphere**                      c) Oceans                      d) Trees
67. Which of the following statements about forest is not correct?  
 a) Forests reduce erosion                      b) Provides recreational opportunities  
 c) Provides a source of economic development                      **d) None of the above**
68. The depletion of trees is causing accumulation of  
 a) NO<sub>2</sub>                      b) SO<sub>2</sub>                      **c) CO<sub>2</sub>**                      d) O<sub>2</sub>
69. As per the FAO definition, the maximum percentage of depletion of tree crown cover, that can be considered as deforestation is  
 a) 50%                      b) 60%                      c) 70%                      d) 90%
70. The natural resource, among the following which is a renewable resource is  
 a) fossil fuel                      b) metallic minerals                      c) non-metallic minerals                      **d) forests**
71. The role of sulphur bacteria in sulphur cycle  
**a) Acts as a media for exchange of sulphur within ecosystem**                      **c) Both a & b**

- b) Converts the dead plants and animals into organic residue d) None of these
72. Nitrogen fixation from the atmosphere is high in which type of plants  
a) Monocotyledon b) Leguminous c) Both a & b d) None
73. Facultative bacteria can exist in which type of environmental conditions  
a) Presence of oxygen b) Absence of Oxygen c) Both a & b d) None of these
74. Which among the following is not concerned to Carbon cycle?  
a) respiration b) combustion of fossil fuels c) photo synthesis **d) transpiration**
75. The movement of carbon between \_\_\_\_\_ is called carbon cycle.  
a) Atmosphere & Biosphere b) Atmosphere & Hydrosphere  
c) Geo-sphere & Atmosphere **d) Biosphere, atmosphere, Hydrosphere & Geo-sphere**
76. Plants can take up nitrogen in two forms \_\_\_\_\_  
**a)  $\text{NH}_4^+$  &  $\text{NO}_3$**  b)  $\text{NH}_3$  &  $\text{N}_2$  c)  $\text{NO}_3$  d)  $\text{NO}_2$
77. Conversion of ammonium to  $\text{NO}_3$  by chemical oxidation is termed as  
a) Mineralization b) Leaching c) Nitrification **d) De-nitrification**
78. Nitrogen fixing bacteria exist in \_\_\_\_\_ of plants.  
a) Leaf **b) Roots** c) Stem d) Flower
79. Sulphur occurs in soil and rocks in the form of \_\_\_\_\_  
a) Oxides of Zn & Fe b) Sulphates of Zn & Fe c) Nitrates of Zn & Fe d) Sulphides of Zn & Fe
80. Conversion of nitrates into gases of nitrogen is called \_\_\_\_\_  
a) Nitrification b) Nitrogen fixing c) Reduction **d) De-nitrification**
81. Fixation of Nitrogen is done by  
a) Lightening **b) Fixing bacteria** c) Fertilizer factory d) All of the above
82. Which among the following is considered as a sedimentary cycle  
a) Sulphur cycle b) nitrogen cycle c) carbon cycle **d) all**
83. Energy is measured in  
a) Blu b) Bhu **c) Btu** d) Ntu
84. One Joule of energy is equivalent to  
a) 0.2389 calories b) 23.89 calories c) 238.9 calories d) 2.389 calories
85. The average annual per capita energy consumption in developed countries of the world is of the order by  
a) 35 GJ b) 125GJ c) 195 GJ d) 245 GJ
86. Which of the following is not a renewable source of energy?  
**a) Fossil fuels** b) Solar energy c) Tidal wave energy d) Wind energy
87. Which of the following is a disadvantage of most of the renewable energy sources?  
a) Highly polluting b) High waste disposal cost c) Unreliable supply d) High running cost
88. The total percentage of non-renewable energy sources available is  
a) 18 b) 82 c) 30 d) 6
89. Good example of renewable energy sources is  
a) **Hydro power** b) Coal c) Oil **d) All these**
90. Identify the non-renewable source of energy from the following  
**a) Coal** b) Fuel cells c) Wind Power d) Wave power

91. Which resources are inexhaustible?  
 a) Renewable                      b) Fossil fuel                      c) Non renewable                      d) Mineral
92. Renewable energy is  
 a) Primary source                      b) Secondary source                      c) Tertiary source                      d) None of these
93. Which of the following is a non-conventional source of energy?  
 a) Wind energy                      b) Solar energy                      c) Biogas                      d) All of the above
94. Solar radiation consists of  
 a) UV                      b) Visible light                      c) Infrared                      d) All of these
95. Oil and Gas are preferred because o  
 a) Easy transportation                      b) Cheap                      c) Strong smell                      d) All of These
96. Fossil fuels are converted into energy by  
**a) Burning**                      b) Cooling                      c) Sublimation                      d) Melting
97. Annual oil consumption in India is about  
 a) 3.25 million tones                      b) 325 million tones                      c) 32.5 million tones                      d) 3.25 billion tones
98. The energy consumption for global transportation is  
 a) 42%                      b) 24%                      c) 4%                      d) 34%
99. Natural gas contains  
 a) Carbon dioxide                      b) Hydrogen                      **c) Methane**                      d) nitrogen
100. Use of Compressed Natural Gas (CNG) came into effect from  
 a) Dec 2000                      b) Dec 2002                      c) Dec 2004                      d) Dec 2006
101. The basic element of fossil fuel is  
**a) Sulphur**                      b) Phosphorous                      c) Carbon                      d) Oxygen
102. The fossil fuel which causes maximum environmental pollution due to its use in generation of thermal power is  
**a) Coal**                      b) Oil                      c) Natural gas                      d) None of these
103. Highest producer of Oil and petroleum is  
**a) Middle East countries**                      b) America                      c) China                      d) India
104. Reduction in usage of fuels cannot be brought about by  
 a) Using alternate fuels                      b) Changing lifestyles                      c) Reducing car taxes                      d) Both a & b
105. Which of the following source of energy is less eco-friendly?  
 a) Biogas                      b) Wind                      **c) Nuclear**                      d) solar
106. Harnessing the wind energy is done by  
**a) Wind Mill**                      b) Ball mill                      c) Flour Mill                      d) Pig mill
107. Coal is a dirty fuel to burn, mainly because it emits  
 a) Oxygen                      b) Nitrogen                      c) Hydrogen                      **d) sulphur-di-oxide**
108. About  $\frac{3}{4}$  of the coal deposits are found in  
 a) Karnataka                      b) Tamil Nadu                      c) Kashmir                      **d) Bihar & Orissa**
109. Wind Farms are located in  
 a) River basin                      b) Plain area                      **c) Hilly area**                      d) Valley area
110. Wind energy generation depends on  
 a) Direction of wind                      **b) Velocity of wind**                      c) Humidity                      d) Precipitation

111. With a minimum resource maximum energy can be created by  
 a) Solar radiation                      b) Wind                      c) Nuclear fuels                      d) tidal waves
112. Which of the following is a hazard of a nuclear power plant?  
 a) Accident risk when tankers containing fuel cause spill  
 b) Radioactive waste of the power plant remains highly toxic for centuries  
 c) Release of toxic gases during processing                      d) All of these
113. The most important fuel used by nuclear power plant is  
**a) U -235**                      b) U-238                      c) U-245                      d) U-248
114. Nuclear power is being produced from  
 a) Carbon-14                      **b) nuclear fission**                      c) petroleum combustion                      d) natural gas
115. The energy released by the decay of one U-235 atom will be of the order of  
 a) 100 MeV                      b) 10 MeV                      c) 200 MeV                      d) 2000 MeV
116. One gram of uranium – 235 can give electrical energy equivalent to  
 a) 0.5 MW                      b) 3 MW                      c) 1 MW                      d) 100 MW
117. Nuclear fusion uses the following as a fuel  
 a) Carbon                      b) Helium                      c) Hydrogen                      d) water
118. Which of the following is used as moderator in the nuclear reactor?  
 a) Graphite                      b) Helium gas                      c) Heavy water                      d) All of the above
119. Nuclear wastes is active for  
 a) 5 years                      b) 10 years                      c) 50 years                      d) centuries
120. Chernobyl nuclear disaster occurred in the year  
 a) 1984                      b) 1952                      **c) 1986**                      d) 1987
121. The Chernobyl nuclear disaster occurred in a power plant at Ukraine was in  
 a) December 1986                      b) June 1986                      **c) April 1986**                      d) October 1986
122. Nuclear power plant in Karnataka is located at  
 a) Bhadravathi                      b) Sandur                      c) Raichur                      **d) Kaiga**
123. Biomass consists of  
**a) Lignin**                      b) Hemi cellulose                      c) Cellulose                      d) All of the above
124. Biogas is produced by  
 a) Microbial activity                      b) Harvesting crop                      c) Both a & b                      d) None of the above
125. Biomass power generation uses  
 a) Crops                      b) Animal dung                      c) Wood                      d) All of these
126. Most popular biogas plants in rural India have a capacity of  
 a) 0.5 m<sup>3</sup>/day                      b) 3 m<sup>3</sup>/day                      c) 10 m<sup>3</sup>/day                      d) 25 m<sup>3</sup>/day
127. Percentage methane content of biogas is  
 a) 5.5                      b) 85                      **c) 55**                      d) 0.55
128. Biogas is gaseous fuel composed mainly of  
 a) **Methane and Carbon dioxide**                      b) Methane and hydrogen sulphide  
 c) Methane and carbon monoxide                      d) None of the above
129. Biomass energy in green plants is produced in presence of  
 a) Carbon dioxide                      b) Water                      c) Sunlight                      **d) All of the above**



130. Which is the source of energy that can be replaced at the same rate at which it is used?  
 a) Coal                              b) Petroleum                              c) Oil                              **d) Biomass**
131. Cow Dung can be used  
**a) as Manure**                              b) for production of Bio gas                              c) as fuel                              d) all of the above
132. Sulabh biogas plants are based on the use of  
 a) Human excreta                              b) Cattle dung                              c) Agriculture waste                              d) None of these
133. India's position in bio gas plants globally  
 a) 5<sup>th</sup>                              b) 2<sup>nd</sup>                              c) 4<sup>th</sup>                              d) 7<sup>th</sup>
134. Molasses from sugar industry is used to generate  
 a) Biodiesel                              b) Hydrogen                              **c) Bioethanol**                              d) Biomethanol
135. Electromagnetic radiation energy is an energy in the form of  
 a) Light                              b) Wave                              b) Heat                              **d) All these**
136. The source of Electromagnetic radiation is  
**a) Sun**                              b) Wind                              c) Tide                              d) Water
137. Electromagnetic radiation propagates energy with a velocity of  
 a)  $3 \times 10^6$  m/sec                              **b)  $3 \times 10^8$  m/sec**                              c)  $3 \times 10^{10}$  m/sec                              d)  $3 \times 10^{12}$  m/sec
138. Direct conversion of solar energy is attained by  
 a) Solar photo voltaic system                              b) Solar diesel hybrid system  
 c) Solar thermal system                              d) solar air heater
139. The quantity of solar energy received by the earth is  
 a) 5%                              b) 15%                              c) 99%                              d) 45%
140. Solar energy is stored in  
 a) Carbon-carbon bonds                              b) Green leaves                              c) Fossil fuels                              d) Biomass
141. Electromagnetic radiation can cause  
 a) Plague                              b) Malaria                              **c) Cancer**                              d) Dengue Fever
142. Energy obtained from Earth's hot interior is called  
 a) Thermal energy                              b) Biomass energy                              **c) Geo-thermal energy**                              d) None of these
143. 'OTEC' is an energy technology that converts  
 a) Energy in large tides of ocean to generate electricity  
 b) Energy in ocean waves to generate electricity  
**c) Energy in ocean due to thermal gradient to generate electricity**  
 d) Energy in the fast moving ocean currents to generate electricity
144. Hydropower potential of India is estimated to be  
 a)  $4 \times 10^{11}$  MW hours                              b)  $4 \times 10^{11}$  kW hours                              c)  $40 \times 10^{11}$  kW hours                              d)  $4 \times 10^{11}$  MW hours
145. In Hydropower plants power is generated by  
 a) Hot springs                              b) Wind                              c) Sun                              **d) Water**
146. Mini hydro-power plants can generate energy upto  
**a) 100 MW**                              b) 1000 MW                              c) 15 MW                              d) 500 MW
147. Which place in India the tidal energy has been experimented?  
 a) Goa                              b) Karnataka                              **c) Kerala**                              d) Tamil Nadu
148. Tidal power plants are not preferred by environmentalists because

- a) Tidal power is a renewable source  
 b) Tidal power can be developed only in coasts  
 c) **Tidal power stations bring about major ecological changes in sensitive coastal ecosystem**  
 d) None of these
149. Which is considered as the energy of the future?  
 a) Wind                              b) Hydrogen                              c) Ocean                              d) None of these
150. Problems of Hydrogen fuel cell is  
 a) storage and distribution    b) availability of hydrogen    c) creates pollution    d) None of the above
151. Hydrogen can be produced commercially by  
 a) Cracking of ammonia    b) Electrolysis of water    c) Both a & b    d) Gasification
152. Hydrogen is found on earth in combination with  
 a) Sulphur                              b) Helium                              c) Copper                              d) Oxygen
153. Hydrogen energy can be tapped through  
 a) heat pumps                              b) fuel cells                              c) photovoltaic cells    d) gasifiers
154. The sources of Hydrogen are  
 a) Biomass                              b) Coal                              c) Water                              d) All these
155. Which of the following is considered as an alternate fuel?  
**a) CNG**                              b) Kerosene                              c) Coal                              d) Petrol

### **MODULE-III**

- Environmental pollution is due to  
 a) Rapid Urbanization              b) deforestation              c) Afforestation              d) a & b
- The human activity, among the following, which causes maximum environmental pollution having regional and global impact is  
 a) Agriculture                              b) urbanization              c) Industrialization              d) Mining
- Which of the following source is surface water?  
 a) Springs                              b) Streams                              c) Deep wells                              d) All
- Domestic sewage is  
 a) Waste water generated from kitchens and bathrooms              b) Waste water generated from industries  
 c) Waste water from residential areas              d) None of these
- The term Refuse generally which does not include is  
 a) Putrescible solid waste              b) Excreta                              c) Non Putrescible solid waste              d) Ases
- Which of the following is a point source of water pollution?  
 a) Factories                              b) Sewage treatment plants              c) Urban and Sub-Urban lands              d) a and b
- Which of the following are natural sources of environmental pollution?  
 a) Automobiles                              b) Sewage                              c) Earth quake                              d) Industries
- Which of the following is a non point source of water pollution?  
 a) Factories                              b) Sewage treatment plants              c) Urban and suburban lands              d) All of the above
- Non-point source of water pollution is caused by  
 a) Pipes                              b) Sewers                              c) Ditches                              d) Mining wastes
- Which of the following are biodegradable pollutants?

- a) Plastics                      b) Domestic sewage                      c) Detergent                      d) All
11. Which of the following is not pollutant causing water pollution?  
a) Biodegradable organic waste                      b) Non biodegradable organic chemicals  
c) Inorganic substances                      d) None of these
12. The liquid waste from baths and kitchens is called  
a) Sullage                      b) Domestic sewage                      c) Storm waste                      d) Run off
13. BOD Means  
a) Biochemical oxygen demand    b) Chemical oxygen demand    c) Biophysical oxygen demand    d) All
14. BOD is a measure of  
a) Non biodegradable organic matter                      b) Biodegradable organic matter  
c) Both a and b                      c) None of these
15. Physical pollution of water is due to  
a) Dissolved oxygen    b) Turbidity                      c) pH                      d) none of these
16. Bio-remediation means the removal of contaminants from  
a) Soil                      b) Waste water                      c) Groundwater                      d) Both Soil and Groundwater
17. Discharge of industrial wastes cause  
a) Depletion of dissolved oxygen                      b) Destruction of aquatic life  
c) Impairing of biological activity                      d) All these
18. Which of the following is a major source of thermal pollution of water bodies?  
a) Sewage treatment plants    b) Thermal power plants                      c) Solid waste disposal                      d) all
19. Which of the following industry generates colored waste?  
a) Software industry                      b) Textile industry                      c) Biomedical industry                      d) none
20. Smog is  
a) Natural phenomenon                      b) Combination of smoke and fog    c) Colorless    d) All of the above
21. Air pollution from automobiles can be controlled by fitting  
a) Electrostatic precipitator    b) wet scrubber                      c) Catalytic converter                      d) all of the above
22. Air pollution control devices suitable for removing dust from air are  
a) Cyclone precipitators                      b) Fabric filters  
c) Settling chambers                      d) Electrostatic precipitators
23. Which of the following statements about carbon monoxide is true?  
a) Forms complex with hemoglobin                      b) Forms complex with leg-hemoglobin  
c) formed by the in-complete combustion of fossil fuels                      d) a and c
24. Which of the following is not a primary air pollutant?  
a) Oxides of Nitrogen                      b) Volatile organic compounds like hydrocarbons  
c) Suspended particulate matter                      d) PAN
25. Which of the following is a secondary air pollutant?  
a) Carbon monoxide                      b) Sulphur dioxide                      c) Ozone                      d) Carbon dioxide
26. Longer exposure to NO<sub>2</sub> even in small concentrations may cause disease pertaining to  
a) Liver                      b) Lung                      c) Kidneys                      d) Heart
27. Which of the following gases is having maximum GWP?  
a) CFC                      b) N<sub>2</sub>O                      c) CH<sub>4</sub>                      d) CO<sub>2</sub>

28. The air pollutant which causes severe damage to plants, even at much lower concentration than what may be harmful to human health is  
a) Fluorine                                      b) Ozone                                      c) PAN                                      d) None of these
29. Which of the following is major cause of soil pollution?  
a) Accident involving vehicles that are transporting waste materials  
b) Pesticides and chemical fertilizers                                      c) Improper solid waste disposal                                      d) all of the above
30. "Minamata Disease" is caused due to  
a) Lead                                      b) Arsenic                                      c) Mercury                                      d) Cadmium
31. Important sources of land pollution are  
a) Industrial wastes                                      b) Agricultural practices                                      c) Both (a) & (b)                                      d) None of these
32. Which of the following is the source of fly ash?  
a) Vehicular exhaust                                      b) sewage                                      c) Thermal power plant                                      d) All
33. Which of the following are non-biodegradable?  
a) Plastics                                      b) Domestic sewage                                      c) detergent                                      d) a and c
34. Smog is combination of  
a) Smoke and fog                                      b) Snow and fog                                      c) Smoke and snow                                      d) All these
35. Many people died in London during 1952 due to  
a) Smog                                      b) Fog                                      c) Mist                                      d) Smoke
36. Smelting of metallic minerals into copper, lead and zinc release large amounts of  
a) Carbon dioxide                                      b) Nitric Oxide                                      c) Sulphur dioxide                                      d) Hydrogen sulphide
37. The unit of measuring noise/sound is  
a) Decibels                                      b) Joule                                      c) ppm                                      d)  $\mu\text{s}$
38. Definition of Noise is  
a) Loud sound                                      b) Unwanted sound                                      c) Constant sound                                      d) Sound of high frequency
39. Sound beyond which of the following level can be regarded as a pollutant  
a) 40 dB                                      b) 80 dB                                      c) 120 dB                                      d) 150 dB
40. Blaring sounds known to cause  
a) Mental distress                                      b) High cholesterol                                      c) Neurological problems                                      d) All of the above
41. Noise pollution is controlled by  
a) Reducing the noise at the source                                      b) Preventing its transmission                                      c) Protecting the receiver                                      d) All
42. Noise pollution can be minimized by  
a) Urbanization                                      b) Maintaining silence                                      c) Reducing noise at source                                      d) none
43. Noise pollution limits at residential area  
a) 45dB                                      b) 80dB                                      c) 55 dB                                      d) 90 dB
44. Noise pollution limits in industrial area  
a) 45dB                                      b) 80 dB                                      c) 65dB                                      d) 90 dB
45. The maximum average permissible noise levels during day time hours as per environment protection act in India is  
a) 30 dB                                      b) 45 dB                                      c) 50 dB                                      d) 55 dB

### MODULE-III

1. Population explosion will cause  
a) Biodiversity      b) Stress on ecosystem      c) More employment      d) None of these
2. Population explosion will cause  
a) Socio economic problems      b) Food scarcity      c) Energy crisis      d) All these
3. In 1960 the world population was around  
a) 1 billion      b) 3 billion      c) 5 billion      d) 7 billion
4. The world population in 2000 was around  
a) 8 billion      b) 6.1 billion      c) 4 billion      d) 4.5 billion
5. Urban population of India as per census 2001 was  
a) 300 million      b) 533 million      c) 285.3 million      d) 415 million
6. Every year World's AIDS day is celebrated on  
a) December 1<sup>st</sup>      b) December 10<sup>th</sup>      c) December 14<sup>th</sup>      d) December 23<sup>rd</sup>
7. The primary reason for large scale decline in population death rate during 20<sup>th</sup> century was  
a) Improved environmental conditions      b) Improved medical care and control of epidemics  
b) Both a and b      d) None of these
8. Which of the following is having high population density?  
a) India      b) China      c) USA      d) Western Europe
9. The major cause of global population growth in the 18th and 19th centuries was  
a) Decreases in death rates      b) Decrease in birth rates      c) Industrial revolution      d) None of these
10. The average life expectancy around the world is currently  
a) Decreasing      b) Increasing      c) Not changing      d) Stabilizing
11. Which of the following is the problem not associated with population growth?  
a) Increase resource consumption      b) Environmental pollution  
c) Food and energy shortages      d) None of these
12. The major objectives of family welfare programs in India is  
a) Disease control      b) Population growth rate control      c) Employment generation      d) None of these
13. Population ageing is  
a) the increase in the average age of the population      b) The result of decreased death and birth rates  
c) The trend where more people live to reach old age while fewer children are born      d) All of the above
14. Which of the following is not population characteristic?  
a) Doubling time      b) Total fertility rate      c) Gross domestic product growth rate      d) Infant mortality rate
15. Demography is the study of  
a) Animals behavior      b) Population growth      c) River      d) None of these
16. Which of the following is the facility that the urban people enjoy?  
a) Better communication access      b) Better quality of air      c) Large land at cheap rates      d) none of these
17. Urbanization is  
a) Local environmental issue      b) National environmental issue      c) Both a & b      d) Not at all an issue
18. Which of the following is the ill effect of urbanization?  
a) Decrease in agricultural land      b) Loss of greenery      c) Loss of water bodies      d) All these
19. Which of the following is not the effect of urbanization?  
a) Air pollution      b) Thermal pollution      c) Solid waste production      d) Noise pollution

20. Which of the following is not a solution for global warming?  
a) Reducing fossil fuel consumption    b) Planting more trees    c) De-forestation    d) None of the above
21. The meaning of global warming is  
a) Increase in the temperature of climate    b) Planet hotter than earth    c) Solar radiation    d) Cooling effect
22. Global warming may bring about the following change in the climate of the earth  
a) Increase in the rain fall    b) Desertification    c) Drought    d) All of the above
23. Which green house gas is known as colourless, non-flammable, sweetish odour and laughing gas?  
a) Methane    b) CO<sub>2</sub>    c) Nitrous Oxide    d) Sulfur hexa fluoride
24. Green house effect causes  
a) Rise in temperature of earth    b) Increase in rainfall    c) Lowering of acid rain  
d) Lowering of temperature of earth
25. Which of the following substantially reduces CO<sub>2</sub> emission from automobiles?  
a) Bio fuels like Ethanol and bio diesel    b) Fossil fuels like coal and lignite  
c) Nuclear element like Uranium    d) Voltaic cells
26. Which of the following is an air pollutant?  
a) Carbon dioxide    b) Oxygen    c) Nitrogen    d) Particulate matter
27. The number of people dying annually over the world due to indoor air pollution is of the order of  
a) 1 Million    b) 1.5 Million    c) 3 Million    d) 5 Million
28. Which of the following substantially reduces CO<sub>2</sub> emission from automobiles?  
a) Bio fuels like Ethanol and bio diesel    b) Fossil fuels like coal and lignite  
c) Nuclear element like Uranium    d) Voltaic cells
29. The major green house gas which is responsible for causing about 60% of the green house effect on earth among the following is  
a) Carbon monoxide    b) Methane    c) NO<sub>x</sub>    d) Carbon dioxide
30. The protocol that reduces green house gas emissions are  
a) Kyoto protocol    b) Cartagena protocol    c) Montreal protocol    d) Vienna protocol
31. Which of the following is not a green house gas?  
a) Hydro chlorofluorocarbons    b) Methane    c) CO<sub>2</sub>    d) SO<sub>2</sub>
32. Global Warming could affect  
a) Climate    b) Increase in Sea level    c) Melting of glaciers    d) All the above
33. Carbon dioxide reacts with moisture in the atmosphere forming  
a) H<sub>2</sub>CO<sub>2</sub>    b) H<sub>2</sub>CO<sub>3</sub>    c) COH<sub>2</sub>    d) CaHCO<sub>3</sub>
34. Which of the following is not a green house gas?  
a) Carbon dioxide    b) Ozone    c) Water vapour    d) Sulphur dioxide
35. Climate and global air circulations are mainly affected by properties of  
a) Water and air    b) Temperature    c) Precipitation    d) None of these
36. The natural disastrous events like volcanoes, earthquakes, cyclones bring about environmental changes which are  
a) Irreversible    b) Reversible    c) Both a and b    d) None of these
37. Which among the following does not constitute a part of a good disaster management system?

- a) Rescue and evacuation      b) Sheltering and Rehabilitation      c) Execution and engineering works  
d) None of these
38. The major automobile pollutants include  
a) CO, NO<sub>x</sub>, Hydrocarbons and SPM,      b) CO, NO<sub>x</sub>, Hydrocarbons and CH<sub>4</sub>  
c) CO<sub>2</sub>, NO<sub>x</sub>, Hydrocarbons and SPM,      d) CO, NO<sub>x</sub>, Freon's and SPM
39. The pollution caused by transportation/vehicular activity depends on  
a) Type of vehicle engine      b) Age of vehicle      c) Traffic congestion      d) All these
40. Petroleum based vehicles emit traces of  
a) CO & NO<sub>x</sub>      b) SPM      c) Aldehydes      d) CH<sub>4</sub>
41. Heavy duty diesel vehicles contribute more  
a) NO<sub>x</sub>      b) Particulate matter      c) CO      d) Both a and b
42. Major pollutants from light petrol vehicles are  
a) CO and Hydrocarbons      b) CO and NO<sub>x</sub>      c) CH<sub>4</sub> and CO<sub>2</sub>      d) All the above
43. The 4-stroke engines produce less of the following as compared to 2-stroke engines  
a) CO and Hydrocarbons      b) NO<sub>x</sub> and SO<sub>2</sub>      c) Both a and b      d) None of the above
44. Alternative eco-friendly fuel for automobiles is  
a) Petrol      b) Diesel      c) CNG      d) Kerosene
45. Green house gas emission from burning fuel in automobiles is around  
a) 16%      b) 10%      c) 20%      d) 5%
46. Increase in asthma attacks has been linked to high levels of  
a) Nitrogen      b) Oxygen      c) Air-borne dust particles      d) All the above

#### **MODULE-IV**

1. The term acid rain was coined in the year  
a) 1952      b) 1852      c) 1652      d) 1752
2. The pH value of the acid rain water is less than  
a) 5.7      b) 7.0      c) 8.5      d) 7.5
3. The highest pH value of acid rain recorded was  
a) 4.5      b) 5.7      c) 7.2      d) 3.0
4. Acidity in rain is measured by  
a) Barometer      b) Hygrometer      c) Ammeter      d) pH meter
5. The primary cause of the acid rain around the world is  
a) CFC      b) SO<sub>2</sub>      c) CO      d) O<sub>3</sub>
6. Acid rain affects  
a) Materials      b) Plants      c) Soil      d) All these
7. Acid rains are more prominent in  
a) Temperate regions      b) Tropical regions      c) Arid regions      d) Equally prominent in all regions
8. Which of the following is the remedial measure for acid rain?  
a) Reducing the release of oxides of nitrogen and sulphur in to the atmosphere from sulphur      b) Use of coal, free  
c) Use of electrostatic precipitator & catalytic converters      d) All of the above
9. Acid rain has been increasing day by day due to



- a) Urbanization      b) industrialization      c) increase in vehicle population      d) none of the above
10. The major contributors to the acid rain are known as  
a) Precursors      b) Processors      c) Protons      d) Pollutants
11. The important gaseous pollutants contributing to acid rain are  
a) SO<sub>2</sub> and NO<sub>x</sub>      b) CO<sub>2</sub> and H<sub>2</sub>S      c) NO<sub>x</sub> and O<sub>3</sub>      d) None of these
12. Acid rain can be controlled by  
a) Reducing SO<sub>2</sub> and NO<sub>2</sub> emissions.      b) Reducing oxygen emission.  
c) Increasing number of lakes.      d) Increasing the forest cover.
13. Atmospheric oxidation of SO<sub>2</sub> to SO<sub>3</sub> is influenced by  
a) Sunlight.      b) Humidity      c) Presence of hydrocarbons      d) All of these
14. Reduction in brightness of the famous Taj Mahal is due to  
a) Global warming.      b) Air pollution      c) Ozone depletion      d) Afforestation.
15. Stone cancer or stone leprosy is caused by  
a) UV rays      b) Green house effect      c) Acid rain      d) Ozone depletion
16. The effect of acid rain  
a) Reduces soil fertility.      b) increases atmospheric temperature.  
c) Causing respiratory problems      d) skin cancer
17. Which of the following is not an ill effect of add rain?  
a) results in killing fish      b) causes stone leprosy      c) leaches nutrients from the soil      d) causes cataract.
18. The movement of nutrients from soil by acid rain is called  
a) Infiltration      b) Transpiration      c) Leaching      d) Exfiltration
19. The process of movement of nutrients from the soil by the Acid rain is called  
a) Transpiration.      b) Evapo- transpiration      c) Leaching      d) Infiltration.
20. Ozone layer is present in  
a) Troposphere      b) Stratosphere      c) Mesosphere      d) Thermosphere
21. Ozone layer thickness is measured in  
a) PPM      b) PPB      c) Decibels      d) Dobson Units
22. Normal average thickness of stratospheric ozone layer across the globe is around  
a) 230 DU      b) 300 DU      c) 400 DU      d) 500 DU
23. Formation of ozone layer is explained by  
a) Rosenmund reaction      b) Henderson's reaction,      c) Chapman's reaction.      d) Perkins's reaction
24. Which of the following statements about ozone is true?  
a) Ozone is a major constituent of photochemical smog      c) Ozone is highly reactive  
b) Ozone protects us from the harmful UV radiation of sun      d) All of the above
25. Major compound responsible for the destruction of stratospheric ozone layer is  
a) Oxygen      b) CFC      c) Carbon dioxide      d) Methane
26. Each Chlorine free Radical can destroy the following number of ozone molecules.  
a) 1000      b) 10,000      c) 1,00,000      d) 100
27. Freons are  
a) HFC      b) CFC      c) NFC      d) Hydrocarbons.



28. Chloro Fluro Carbon's (CFC) are  
a) Non toxic                      b) Non flammable                      c) Non carcinogenic                      d) All the above
29. Ozone layers absorbs  
a) UV rays                      b) Infra red rays                      c) Cosmic rays                      d) CO
30. Ozone hole was first discovered over  
a) Arctic`                      b) Antarctica                      c) tropical region                      d) Africa
31. CFCs have been used as  
a) Solvent                      b) refrigerants                      c) blowing agents for polymer forms                      d) all of these
32. World Ozone day is being celebrated on  
a) September 5th                      b) October 15<sup>th</sup>                      c) September 16th                      d) September 11<sup>th</sup>
33. The international protocol to protect the Ozone layer is  
a) Vienna protocol                      b) Kyoto protocol                      c) Cartagena protocol                      d) Montreal protocol
34. Which of the following statements about ozone is true?  
a) Ozone is a major constituent of photochemical smog                      b) Ozone is highly reactive  
c) Ozone protects us from the harmful UV radiation of sun.                      d) All of the above
35. Ozone depletion causes  
a) Snow blindness                      b) Photochemical smog                      c) acid rain                      d) vomiting
36. Which of the following statement is not true about animal husbandry?  
a) it is a part of agricultural activity.                      b) it is breeding, feeding and management of animals.  
c) it is livestock production.                      d) it is protection of wild life
37. Which of the following is the purpose of animal husbandry?  
a) conservation of animal husbandry                      b) production of meat  
c) conservation of wildlife                      d) conservation of forests.
38. Domesticated animals are used for  
a) Dairy products.                      b) Production of fiber                      c) Production of meat                      d) All of these
39. Animal husbandry results in  
a) Global warming                      b) Acid rain                      c) Ozone depletion                      d) none of these
40. Live stock wastes release large amount of \_\_\_\_\_ into environment.  
a) NH<sub>4</sub>                      b) NH<sub>3</sub>                      c) NO<sub>3</sub>                      d) NO<sub>4</sub>
41. The science of animal husbandry is called  
a) Plant science                      b) Soil science                      c) Animal science                      d) Human science

#### MODULE-V

1. In which year did the Hon'ble supreme court of India made environment education compulsory subject at all levels of education?  
a) 2000                      b) 2001                      c) 2002                      d) 2003
2. Environmental protection is the responsibility of  
a) Govt. of India                      b) NGOs                      c) Individual                      d) All
3. Earth Day is held every year on  
a) June 5th                      b) November 23rd                      c) April 22nd                      d) January 26<sup>th</sup>
4. World Environment day is on

- a) 5th May                      b) 5th June                      c) 18th July                      d) 16th August
5. Environmental (Protection) Act was enacted in the year  
a) 1986                      b) 1992                      c) 1984                      d) 1974
6. The environment act was enacted by Indian parliament under article 253 of the constitution of India and made applicable to all states of India in the year  
a) 1974                      b) 1981                      c) 1986                      d) 1989
7. The Air (Prevention & Control of Pollution) Act was enacted in the year  
a) 1981                      b) 1996                      c) 2000                      d) 1974
8. The Water (Prevention & Control of Pollution) Act was enacted in the year  
a) 1986                      b) 1974                      c) 1994                      d) 2004
9. The Wild Life Protection Act was enacted in the year  
a) 1986                      b) 1974                      c) 1994                      d) 1972
10. The Forest (Conservation) Act was enacted in the year  
a) 1986                      b) 1974                      c) 1980                      d) 1972
11. The first of the major environmental protection Act to be promulgated in India was  
a) The Wild Life Protection Act    b) The Air Act    c) The Noise Pollution Act    d) None of the above.
12. Which is the first country to amend laws for punishment of crimes related to environmental pollution?  
a) Spain                      b) Brazil                      c) United states                      d) Japan
13. The Environmental (Protection) Act 1986 deals with:  
a) Water                      b) Air                      c) Soil                      d) All.
14. Environmental Protection is the fundamental duties of the citizen of India under the Article:  
a) 51-A                      b) 48-A                      c) 47                      d) 21
15. The objective of the Wild Life (Protection) Act 1972 is:  
a) To preserve the biodiversity                      b) To maintain essential ecological and life supporting systems  
c) Protection & conservation of wild life                      d) All
16. The Central Pollution Control Board was established under the provision of  
a) Environmental (Protection) Act 1986                      b) Air (Prevention & Control) Act 1981  
c) Water (Prevention & Control of Pollution) Act 1974                      d) None of the above.
17. The Karnataka State Pollution Control Board (KSPCB) was established in the year  
a) 1974                      b) 1982                      c) 1986                      d) 1976
18. Which of the followings is NGO?  
a) Narmada Bachao Andolan                      b) CPCB                      c) KSPCB                      d) None
19. Which of the following is empowered to take measures to protect & improve environment as per the Environment (Protection) Act?  
a) Central Govt.                      b) State Government                      c) Corporation                      d) None
20. Which of the following is the authority to monitor industrial effluents?  
a) Center for Science & Environment                      b) State Pollution Control Board  
c) Indian Environmental Association                      d) None
21. The leader of Chipko movement is:  
a) Sunderlal Bahuguna                      b) Medha Patkar                      c) Vandana Shiva                      d) Suresh Heblikar
22. The Tiger Conservation Project was started in:

- a) 1973                      b) 1984                      c) 1999                      d) 2004
- 23.** The goal of National Parks & Wild life Sanctuaries is  
 a) To promote international trading of animals & their products                      b) To evacuate tribal people from forest  
 c) Conservation of Wild Life                      d) None of the above.
- 24.** Environmental education is targeted to:  
 a) General public                      b) professional social groups                      c) Technicians & Scientists                      d) All
- 25.** Which of the following animals is endangered species of India?  
 a) Black buck                      b) Elephant                      c) Fox                      d) Giraffe
- 26.** Which State is having highest women literacy rate in India:  
 a) Karnataka                      b) Punjab                      c) Rajasthan                      d) Kerala
- 27.** What is the percentage of women literacy rate of India according to census 2001?  
 a) 65%                      b) 55%                      c) 54.16%                      d) 75.85%
- 28.** Which of the following was UN decade for women?  
 a) 1965 – 75                      b) 1975 – 85                      c) 1985 – 95                      d) 1995 – 2005
- 29.** An International Conference on Environmental Education was held in December 1982 at:  
 a) Kyoto                      b) Vienna                      c) New-Delhi                      d) London
- 30.** First World Environmental Conference was held at  
 a) Stockholm, 5<sup>th</sup> June 1972                      b) Johannesburg, 5<sup>th</sup> June 1972                      c) Rio-de-genero, 5<sup>th</sup> June 1992                      d) none
- 31.** Second World Environmental Conference was held at  
 a) Stockholm, 5<sup>th</sup> June 1972                      b) Johannesburg, 5<sup>th</sup> June 1972                      c) Rio-de-genero, 5<sup>th</sup> June 1992                      d) none
- 32.** Third World Environmental Conference was held at  
 a) Stockholm, 5<sup>th</sup> June 1972                      b) Johannesburg, 5<sup>th</sup> June 2002                      c) Rio-de-genero, 5<sup>th</sup> June 1992                      d) none
- 33.** The objectives of Integrated Child Development Services (ICDS) are:  
 a) Immunization                      b) Health check up & referral services  
 c) Pre-school and non-formal education                      d) All the above
- 34.** The country which has the largest number of child labourers in the world is  
 a) India                      b) Bangladesh                      c) China                      d) Pakistan
- 35.** The Pakistani boy, who while working for a NGO ‘Bonded Labour Liberation Front’, widely traveled Europe to convince customers not to buy Pakistani carpets because they were being prepared by poor children who worked overtime, who was later killed in 1995 was  
 a) Ehson Ullah Khan                      b) Iqbal Masiah                      c) Imran Khan                      d) None of these
- 36.** ISO 14000 standards deal with:  
 a) Pollution Management                      b) Risk management                      c) Environmental Management                      d) none of the above
- 37.** World summit on sustainable development was held at  
 a) Johannesburg in 2002                      b) Rio de Janeiro in 1992                      c) Kyoto in 1994                      d) Stockholm in 2000
- 38.** An important NGO involved in Global environmental protection is  
 a) UNICEF                      b) Green Peace                      c) WHO                      d) CPCB
- 39.** The first International Earth Summit was held at  
 a) Johannesburg                      b) Rio de Janeiro                      c) Kyoto                      d) Stockholm
- 40.** Silent Valley movement succeeded in  
 a) Waste management in sea coast                      b) Canceling the state government Hydel project and saving

the Lion- Tailed Monkeys      c) Promoting marine fishery business in Kerala      d) None of the above

**41.** The committee which submitted its report to Government of India on Environmental education is

a) Tiwari Committee    b) Mehta committee    c) Banerjee Committee    d) Agarwal Committee

**42.** The main objectives of family welfare programs in India is

a) Disease control    b) Population growth control    c) Employment generation    d) None of these

**43.** How many Indian states have so far set up State Human Rights Commissions?

a) 12                      b) 14                      c) 16                      d) 28

**44.** The Mahila Arthik Vikas Mandal (MAVIM) was setup in the year

a) 1955                      b) 1965                      c) 1975                      d) 1985

**45.** The method of rain water harvesting which can be best adopted by local governments or panchayats is

a) construction of check dams across local streams  
b) construction of recharge trenches in village ponds and storm water drains  
c) creation of new water bodies like ponds  
d) all the above