All Module - Consolidated with ans

Computer science (AJ Institute of Engineering and Technology)

MODULE-I: 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_2 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) 25^0 C to 55^0 C **b) -56^0 C to -2^0 C** c) 10^0 C to -5^0 C d) none

13. Troposphere mainly consists of
a) CO_2 b) H_2 c) O_3 **d) O_2 and N_2**

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 is
a) 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 fo1lowing 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_2** 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**

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) <u>All these</u>**

91. Ecosystem is disturbed by housing activity because
a) <u>Large volume of raw materials like brick, stone, timber, cement, steel plastic etc are required to be produced</u>
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 modem houses

92. Major problem/s due to industrialization is /are
a) Urbanization b) Migration of people c) Development of slums **d) <u>All these</u>**

93. Which of the following is not the environmental effect of industrialization in general?
a) Solid waste b) Water pollution c) Air pollution **d) <u>Economics</u>**

94. Sulphur dioxide is used in
a) Paper manufacture b) Textile manufacture **c) <u>Processing of fossil fuels</u>** 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) <u>Industry should treat all the wastes generated by it before disposal</u>
d) Industries should be shifted far away from human habitats.

96. Bhopal gas tragedy occurred in the year
a) 1974 **b) <u>1984</u>** c) 1994 d) 1979

97. Bhopal Gas Tragedy caused due to leakage of
a) <u>Methyl Iso Cyanate (MIC)</u> 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) <u>To extract minerals and ores</u> d) None

99. Mining of ores is done by
a) sub-surface mining b) tunneling c) only sub-surface mining **d) <u>both a and b</u>**

100. Environmental impact of mining
a) Brings order into social setup **b) <u>Devastation of ecosystem</u>**
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) <u>Loss of grazing and fertile land</u>** 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) <u>All these</u>**

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) <u>Creep</u>** d) Landslide

104. In order to protect the health of people living along the adjoining areas of roads, one should.
a) <u>Plant trees alongside of the roads</u> 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) <u>All of the above</u>**

106. E.I.A can be expanded as
a) Environment & Industrial Act b) Environment & Impact Activities
c) <u>Environmental Impact Assessment</u> d) Environmentally Important Activity

107. E.I.A is related to
a) Resource conservation
b) Efficient equipment/process
c) Waste minimization
d) <u>All of the above</u>

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) <u>Both a and b</u>
d) None of the above

109. EIA study will help
a) <u>Maximizing the benefits without overloading the planets ecosystem</u>
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) <u>Encourages environmentally economic growth</u>
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) <u>Maximizing the present day benefits through increased resource consumption</u>

112. Sustainability requires
a) Conservation of resources
b) Minimizing depletion of non-renewable resources
c) Using sustainable practices for managing renewable resources
d) <u>All the above</u>

113. The idea of sustainable development was defined for the first time by the world commission on economic development
a) 1985
b) <u>1987</u>
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) <u>All</u>

115. What would you do to prevent environmental damage?
a) Plant trees
b) Halt deforestation
c) Control pollution
d) <u>All of the above</u>

<u>MODULE-II</u>

1. About _____% of the earth's surface is covered by water
a) 53%
b) 19%
c) <u>71%</u>
d) 90%

2. The average annual per capita energy supply of fresh water available in the world is about
a) <u>1700 m^3</u>
b) 7200 m^3
c) 19600 m^3
d) 2700 m^3

3. The oceans are the largest storage of water on earth containing:
a) 95% of earths water
b) 85% of earth's water
c) <u>97% of earths water</u>
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) <u>less than 1%</u>

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) Coli form 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

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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) Nagarahole 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_2 b) SO_2 **c) CO_2** d) O_2

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) NH_4^+ & $N0_3$ b) NH_3 & N_2 c) NO_3 d) NO_2

77. Conversion of ammonium to $N0_3$ 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 ¾ 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) **Light water**

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 Ukrine 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^3/day b) **3 m^3/day** c) 10 m^3/day d) 25 m^3/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^{th} b) **2^{nd}** c) 4^{th} d) 7^{th}

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 x 10^6 m/sec **b) 3 x 10^8 m/sec** c) 3 x 10^{10} m/sec d) 3 x 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) **71%**

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 x 10^{11} MW hours** b) 4 x 10^{11} kW hours c) 40 x 10^{11} kW hours d) 4 x 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

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

1. Environmental pollution is due to
a) Rapid Urbanization b) deforestation c) Afforestation d) **a & b**

2. 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

3. Which of the following source is surface water?
a) Springs b) **Streams** c) Deep wells d) All

4. 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

5. The term Refuse generally which does not include is
a) Putrescible solid waste **b) Excreta** c) Non Putrescible solid waste d) Ases

6. 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**

7. Which of the following are natural sources of environmental pollution?

a) Automobiles b) Sewage c) **Earth quake** d) Industries

8. 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

9. Non-point source of water pollution is caused by
a) Pipes b) **Sewers** c) Ditches d) Mining wastes

10. 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 (Peroxyacetyl Nitrate)**

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_2 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_2O c) CH_4 d) CO_2

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) µs

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) **l20 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 1st** b) December 10th c) December 14th d) December 23rd

7. The primary reason for large scale decline in population death rate during 20th 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**

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**

21. The meaning of global warming is
a) **Increase in the temperature of climate** c) Planet hotter than earth
b) 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) $C0_2$ 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_2 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 not 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_2 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_x 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) $C0_2$ d) $S0_2$

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_2CO_2 b) **H_2CO_3** c) COH_2 d) $CaHCO_3$

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_x, Hydrocarbons and SPM,** b) CO, NOx, Hydrocarbons and CH_4
c) CO_2, NO_x, Hydrocarbons and SPM, d) CO, NO_x, 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_x b) SPM c) Aldehydes d) **CH_4**

41. Heavy duty diesel vehicles contribute more
a) NO_x 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_x** c) CH_4 and CO_2 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_x and SO_2 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_2** c) CO d) O_3

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
b) Use of coal, free from sulphur
c) Use of electrostatic precipitator & catalytic converters d) **All 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_2 and NO_x** b) CO_2 and H_2S c) NO_x and O_3 d) None of these

12. Acid rain can be controlled by
a) **Reducing $S0_2$ and $N0_2$ emissions.** b) Reducing oxygen emission.

c) Increasing number of lakes. d) Increasing the forest cover.

13. Atmospheric oxidation of $S0_2$ to $S0_3$ 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) l000 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 15th c) **September 16th** d) September 11th

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_4 b) **NH_3** c) NO_3 d) NO_4

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 26th

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

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, 5th June 1972** b) Johannesburg, 5th June 1972 c) Rio-de-genero, 5th June 1992 d) none

31. Second World Environmental Conference was held at
a) Stockholm, 5th June 1972 b) Johannesburg, 5th June 1972 c) **Rio-de-genero, 5th June 1992** d) none

32. Third World Environmental Conference was held at
a) Stockholm, 5th June 1972 b) **Johannesburg, 5th June 2002** c) Rio-de-genero, 5th June 1992 d) none

33. The objectives of Integrated Child Development Services (ICDS) are:
a) Immunization b) Health checkup & 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**