First/Second Semester B.E Degree Examination, June/July 2015
Environmental Studies
(COMMON TO ALL BRANCHES)

(Time: 2 hrs.)

[Max. Marks: 50]

INSTRUCTIONS TO THE CANDIDATES

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

1. Nutrient cycling is most related to appropriately.
a) Energy, waste, nutrients b) Autotrophs, nutrients, decomposers
c) Light, weight, nutrients d) None of these

2. In an ecosystem, the flow of energy is
a) Bidirectional b) Cyclic c) Unidirectional d) Multidirectional

3. Which of the following is not a part of the hydrological cycle?
a) Precipitation b) Infiltration c) Transpiration d) Perspiration

4. The word ‘Environment’ is derived from
a) Greek b) French c) Spanish d) English

5. Which of the following is the terrestrial ecosystem?
a) Forest b) Grass land c) Desert d) All of these

6. Which of the following is not a part of atmosphere?
a) Heterosphere b) Mesosphere c) Biosphere d) Stratosphere

7. 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.
8. 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 of these.

9. Mineral resources are
   a) Renewable
   b) Non renewable
   c) Equally distributed
   d) None of the above

10. India has the largest share of which of the following?
    a) Manganese
    b) Mica
    c) Copper
    d) Diamond

11. Fluoride though is an effective agent to preventing dental caries, has a maximum permissible limit of
    a) 0.5 mg/l of water
    b) 1.5 mg/l of water
    c) 5 mg/l of water
    d) 15 mg/l of water

12. Carbon content is higher in
    a) Soil
    b) Atmosphere
    c) Water
    d) Lining matter

13. Cholera and typhoid are causes by
    a) Worms
    b) Virus
    c) Bacteria
    d) Fungus

14. 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

15. Major source of fluoride is
    a) River water
    b) Tooth past
    c) Ground water
    d) Food products

16. LPG is a mixture of
    a) N₂ and H₂S
    b) CO₂ and N₂
    c) Propane and butane
    d) Methane and ethane

17. Nuclear fusion reaction occurs in
    a) The sun
    b) Stars
    c) Hydrogen bomb
    d) All the these

18. Choose the sequence of production of electricity from hydrogen
    i) Electrolysis of water
    ii) Performing a fuel cell reaction
    iii) Storage of hydrogen
    a) (i), (ii), (iii)
    b) (i), (iii) and (ii)
    c) (ii), (iii) and (i)
    d) (i), (ii) and (iii)

19. Chernobyl nuclear disaster occurred in the year
    a) 1984
    b) 1952
    c) 1986
    d) 1987

20. Which resources are inexhaustible?
    a) renewable
    b) fossil fuel
    c) non renewable
    d) mineral

21. 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
22. Which place in India the tidal energy has been experimented?
   a) Goa  b) Karnataka  c) Kerala  d) Tamil Nadu

23. Hydrogen energy can be tapped through
   a) heat pumps  b) fuel cells  c) photovoltaic cells  d) gasifiers

24. Molasses from sugar industry is used to generate
   a) biodiesel  b) hydrogen  c) bioethanol  d) biomethanol

25. Bhopal gas tragedy caused due to the leakage of
   a) Methyl ISO Cyanate (MIC)  b) Methane  c) Sulphur dioxide  d) Carbon monoxide

26. Noise pollution limits at residential area
   a) 80 dB  b) 45 dB  c) 60 dB  d) 90dB

27. Ozone layer is present in
   a) Troposphere  b) Stratosphere  c) Mesosphere  d) Thermosphere

28. Odour in water can be removed by
   a) Aeration  b) Changing pH  c) Sedimentation  d) None of these

29. Which of the following is an air pollutant:
   a) Oxygen  b) Particulate matter  c) Nitrogen  d) Carbon dioxide

30. The protocol that reduces green house gas emission is
   a) Kyoto protocol  b) Montreal protocol  c) Vienna protocol  d) Basal protocol

31. The process of movement of nutrients from the soil by acid rain is called
   a) Transpiration  b) Thermosphere  c) Infiltration  d) Leaching

32. Which of the following is not a method for water conservation:
   a) rain water harvesting  b) reducing water usage  c) ground water extraction  d) water recycling

33. Smog is
   a) natural phenomenon  b) combination of smoke and fog  c) colourless  d) all of these

34. The wild life protection act in India was passed in
   a) 1978  b) 1972  c) 1986  d) 1992

35. Air (prevention and control of pollution) Act in India was passed in
   a) 1970  b) 1975  c) 1981  d) 1990

36. The Tiger conservation project was started is
   a) 1973  b) 1974  c) 1981  d) 1990

37. The leader of “Chipko movement” is
   a) Sunder Lal Bahuguna  b) Medha Patkar  c) Vandana Shiva  d) None of these
38. "Earth day" is observed on 
a) 1st December  b) 5th June  c) April 22nd  d) 1st January

39. 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

40. BOD means 
a) Biochemical oxygen demand  b) Chemical oxygen demand  
c) Biophysical oxygen demand  d) All of these

41. The pH value of the acid rain water is 
a) 5.7  b) 7.0  c) 8.5  d) 7.5

42. Ozone layer thickness is measured in 
a) PPM  b) PPB  c) Decibels  d) Dobson units

43. 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.

44. Wind energy generation depends on 
a) direction of wind  b) velocity of wind  c) humidity  d) precipitation

45. Nitrate concentration above 45 mg/l causes 
a) Vomiting  b) Dysentery  c) Typhoid  d) Blue Baby disease

46. Ozone hole is said to occur when the ozone level decreases below 
a) 200 Du  b) 2000 Du  c) 20 Du  d) 2 Du

47. Acid rain can be controlled by 
a) reducing SO2 and NO2 emissions  b) reducing CO and hydrocarbons emissions  
c) Increasing number of lakes  d) None of these

48. Animal husbandry may result in 
a) Global warming  b) Acid rain  c) Ozone depletion  d) None of these

49. Freons are 
a) HFC  b) CFC  c) NFC  d) Hydrocarbons

50. Ozone hole was first discovered over 
a) Arctic  b) Antartica  c) Tropical region  d) Africa.

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