Environmental Studies - June 2014 **TOTAL MARKS: 100 TOTAL TIME: 3 HOURS** (1) Question 1 is compulsory. (2) Attempt any **four** from the remaining questions. (3) Assume data wherever required. (4) Figures to the right indicate full marks. 1The air prevention and control of pollution Act was enacted in the year\_\_\_\_\_ (1 marks) a) 1987 b) 1974 c) 1981 d) 1986 **2**Smog is fromed by the reaction of which air pollutants. (1 marks) a) Smoke and mist b) Smoke and fog c) Smoke and biogas d) Smoke and dust **3**Which of the following is not a solution for global warming? (1 marks) a) Reducing use of fossil fuels b) Planting more trees c) Deforestation d) Reducing vehicular transportation **4**Methemoglobinemia is caused by the contamination of water due to \_\_\_\_\_ (1 marks) a) Mercury b) Nitrate c) Arsenic d) Nitrates **5**Earth's day is celebrated on \_\_\_\_\_ every year (1 marks) a) June 22 b) Sept 22 c) Aprill 22

**6**HIV can be transmitted to humans through which media?

(1 marks)

- a) air
- b) Blood

d) June 5

c) Virus

| d) Hereditary  |           |
|--|-----------|
| 7Mineral resources are a) Renewable b) Fossil fuels c) Non-renewable d) Sedimentary rocks                                    | (1 marks) |
| 8World Ozone day is being celebrated on every year a) 15 Sept b) 16 October c) 16 Sept d) 22 April                           | (1 marks) |
| 9Contribution of carbon dioxide to global warming from industries a) 50% b) 24% c) 25% d)75%                                 | (1 marks) |
| 10Which atmospheric layer is closest to the Earth's surface?  a) Mesosphere b) Troposphere c) Stratosphere d) Thermosphere   | (1 marks) |
| 11Ozone is present in which layer of the atmosphere a) Ozonosphere b) Stratosphere c) Troposphere d) Ionosphere              | (1 marks) |
| 12What is the maximum allowable concentration of fluorides in drinking water? a) 1.0mg/l b) 1.25mg/l c) 1.50mg/l d) 1.60mg/l | (1 marks) |
| 13Which of the following gas is not concerned with the green house effect? a) CO2 b) CH4 c) SO2                              | (1 marks) |

| 14Which of the following is not a renewable source of energy? a) Solar b) Wind   | (1 marks) |
|--|-----------|
| c) Nuclear<br>d) Geo-thermal   |           |
| 15Optimum growth of bacteria in favorable pH value of<br>a) 6.5 - 8.5<br>b) 7.0<br>c) 6.5 - 7.5<br>d) 7.0 - 14.0   | (1 marks) |
| 16Eutrophication means a) Quality of water in lakes b) Enrichment of plant nutrients in water c) Water purification technique d) Meeting point of river and sea. | (1 marks) |
| 17Earth's body temperature is approximately equal to?  a) 16.4 degree celcius b) 16.6 degree celcius c) 36 degree celcius d) 21.6 degree celcius                 | (1 marks) |
| 18Presence of BOD in drinking water indicates a) Rich content of oxygen b) Organic matter c) Turbidity d) Physical impurities                                    | (1 marks) |
| 19Which of the following is a natural source of Air pollution?  a) Acid rain b) Precipitation c) Storms d) Volcanic eruption                                     | (1 marks) |
| 20Effect of carbon monooxide on blood, causing a) H2CO3 b) COHb c) CO2Hb   | (1 marks) |

d) H2O vapor

| d) HbCO2  |           |
|---|-----------|
| 21 Anthropogenic activities means a) Natural made b) Biological c) Man made d) Animal made  | (1 marks) |
| 22Which of the following energy source is less eco-friendly?  a) Wind  b) Water  c) Solar  d) Thermal                             | (1 marks) |
| 23Which of the following is a biotic component of an ecosystem?  a) Sunlight b) Fungi c) Temperature d) Water                     | (1 marks) |
| 24Generation of wind energy is mainly based on which factor?  a) Direction of wind b) Storms c) Velocity of wind d) Wind pressure | (1 marks) |
| 25 Example of abiotic component of an ecosystem a) Plants b) Food c) Water d) Live stock  | (1 marks) |
| 26Expansion of the term WWF is a) World Wide life Force b) World Wide Forest c) World Wide life Forest d) World Wild life Fund    | (1 marks) |
| 27Maximum allowable concentration of total hardness as per BIS in drinking water is   | (1 marks) |

a) 600mg/lb) 300mg/l

| c) 1000mg/l<br>d) 250 mg/l  |           |
|---|-----------|
| 28Water pollution prevention and control act was enacted in the year<br>a) 1986<br>b) 1974<br>c) 1981<br>d) 1987            | (1 marks) |
| 29Stone cancer is an effect of a) Climatic change b) Hard water c) Acid rain d) Excess of calcium                           | (1 marks) |
| 30Most stable eco-system is a) Mountain b) Ocean c) Population d) Fossil fuels  | (1 marks) |
| 31Example for tertiary consumers a) Plants b) Cattle c) Snake d) Elephant   | (1 marks) |
| 32As per BIS, the minimum allowable limit of iron content in drinking water is  a) 1.0mg/l b) 0.2mg/l c) 0.3mg/l d) 0.5mg/l | (1 marks) |
| 33 In hydro power plants, power is generated by a) Solar b) Thermal c) Water d) Coal  | (1 marks) |

| 34The pH value of acid rain was recorded in early days   | (1 marks) |
|--|-----------|
| a) 2.5   |           |
| b) 7.5   |           |
| c) 4.7<br>d) 5.7   |           |
|  |           |
| 35First international Earth summit was held at   | (1 marks) |
| a) USA<br>b) Russia  |           |
| c) Rio-de-Janeiro  |           |
| d) Johannesberg  |           |
| 36Bhopal gas tragedy was caused due to leakage of  | (1 marks) |
| a) CH4   |           |
| b) MIC   |           |
| c) SO2<br>d) Pesticides  |           |
| d) I esticides   |           |
| 37Karnatake state pollution control board was established in the year  | (1 marks) |
| a) 1984  |           |
| b) 1976  |           |
| c) 1974  |           |
| d) 1983  |           |
| 38Among all oxides of nitrogen which one is responsible for the formation of the   | (1 marks) |
| acid rain?   |           |
| a) Nitrous oxide   |           |
| <ul><li>b) Nitric oxide</li><li>c) Nitrogen trioxide</li></ul>   |           |
| d) Nitrogen pentoxide  |           |
|  |           |
| 39The liquid waste generated from municipal solid waste disposal pits is called  | (1 marks) |
| a) Solid waste water   |           |
| b) Sewage<br>c) Leachate   |           |
| d) Compost waste water   |           |
| r and the second |           |
| 40Minimum allowable limit of noise pollution for human persistence is  | (1 marks) |
| a) 40dB  |           |
| b) 90dB  |           |
| c) 45dB<br>d) 55dB   |           |
| u) Jour  |           |

| 41Demography means  | (1 marks)    |
|---|--------------|
| a) Study on forest  |              |
| b) Study on human activities c) Study on earthquake                 |              |
|   |              |
| d) Study on population growth                                       |              |
|   |              |
| 42Freons are called   | (1 marks)    |
| a) Hydrocarbons   |              |
| b) Ozone  |              |
| c) Methane  |              |
| d) Solvents   |              |
| 43Which of the following is a biodegradable pollutant?              | (1 marks)    |
| a) DDT  |              |
| b) Sewage   |              |
| c) CFC  |              |
| d) Freons   |              |
|   |              |
| 44Percentage of ground water available on Earth's environment is    | (1 marks)    |
| a) 0.02   | ,            |
| b) 0.5  |              |
| c) 1.5  |              |
| d) 0.2  |              |
| 45During green house effect, carbon dioxide and water vapor absorbs | (1 marks)    |
| a) Short wave radiations  | (1 marks)    |
| b) Long wave radiations   |              |
| c) Solar radiation  |              |
| d) UV radiations  |              |
|   |              |
| <b>46</b> Amount of Carbon dioxide present in atmosphere air is     | (1 marks)    |
| a) 21%  |              |
| b) 0.383%   |              |
| c) 78%  |              |
| d) 0.318%   |              |
| 47Estuary means   | (1 marks)    |
| a) Rich in nutrients  | (1 11101185) |
| b) End point of the river   |              |
| c) Meeting place of river and sea                                   |              |
| d) Treatment of water   |              |
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48Physical pollution of water is due to (1 marks) a) Chlorides b) Turbidity c) pH d) All of these 49Control of water borne diseases can be achieved effectively in a community by (1 marks) a) Defluoridation b) Disinfection c) Sterilization d) Vaccination **50**Ozone layer thickness is measured in which units? (1 marks) a) PPM b) PPB c) Db d) DU