

BALLARI INSTITUTE OF TECHNOLOGY & MANAGEMENT

(Autonomous Institute under Visvesvaraya Technological University, Belagavi)

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Course Code

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Fifth Semester B.E. Degree Examinations, February 2025

ENVIRONMENTAL STUDIES

Duration: 1 hr

Max. Marks: 50

Instructions to the Candidates:

- All questions are compulsory
- Each question carries 1 mark
- Use only black ball point pen
- Darkening two circles for the same question makes the answer invalid
- Damaging/overwriting, using whiteners on the OMR are strictly prohibited.

Q.NoQuestion

- The objective of environmental education is
A. Raise consciousness about environmental conditions
B. To teach environmentally appropriate behaviour
C. Create an environmental ethic
D. All of the above
- About..... % of the earth is covered by water
A. 53% B. 19% C. 71% D. 33%
- Troposphere mainly consists of
A. CO₂ B. H₂ C. O₃ D. O₂ and N₂
- The volume of nitrogen present in the troposphere is
A. 85% B. 78% C. 21% D. 5%
- Which atmospheric sphere is closest to the earth surface?
A. Troposphere B. Stratosphere C. Mesosphere D. Exosphere
- The term ecosystem was first proposed by
A. Jacob Van Verkul B. A.G. Tansley C. Costana D. Marie Gibbs
- A simple food chain starts with
A. green plants B. waste of organisms and dead organisms
C. both of these D. none of these
- What is the target year for achieving the Sustainable Development Goals?
A. 2025 B. 2030 C. 2040 D. 2050
- Goal 13 of the SDG is focused on which of the following issues?
A. Climate Action B. Gender Equality
C. Clean Water and Sanitation D. Economic Growth
- How many goals are included in the Sustainable Development Goals framework?
A. 10 B. 12 C. 15 D. 17
- Which of the following is not a renewable source of energy?
A. Fossil fuels B. Solar energy C. Tidal wave energy D. Wind energy
- Solar radiation consists of
A. UV rays B. Visible light C. Infrared D. All of these
- Use of Compressed Natural Gas (CNG) came into effect from
A. Dec 2000 B. Dec 2002 C. Dec 2004 D. Dec 2006
- Which of the following source of energy is less eco-friendly?
A. Biogas B. Wind C. Nuclear D. solar
- With a minimum resource maximum energy can be created by
A. Solar radiation B. Wind C. Nuclear fuels D. tidal waves

16. In Hydropower plants, power is generated by
A. Hot springs B. Wind C. Sun D. Water
17. Hydrogen is found on earth in combination with
A. Sulphur B. Helium C. Copper D. Oxygen
18. What are the three R's to save the environment?
A. Reduce, Recycle, Reuse B. Replenish, Reduce, Reuse
C. Reconstruct, Recycle, Reduce D. Reduce, Recycle, Remove
19. What is the primary purpose of carbon trading?
A. To reduce greenhouse gas emissions B. To increase fossil fuel consumption
C. To generate revenue for governments D. To promote sustainable development
20. The instrument which records earthquake wave is called
A. Climograph B. Seismograph C. Hythergraph 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. 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
23. Which of the following is not a green house gas?
A. Carbon dioxide B. Ozone C. Water vapour D. Sulphur dioxide
24. Climate and global air circulations are mainly affected by properties of
A. Water and air B. Temperature C. Precipitation D. None of these
25. The major automobile pollutants include
A. CO, NO_x, Hydrocarbons and SPM, B. CO, NO_x, Hydrocarbons and CH₄
C. CO₂, NO_x, Hydrocarbons and SPM, D. CO, NO_x, Freon's and SPM
26. Petroleum based vehicles emit traces of
A. CO & NO_x B. SPM C. Aldehydes D. CH₄
27. Green house gas emission from burning fuel in automobiles is around
A. 16% B. 10% C. 20% D. 5%
28. Increase in asthma attacks has been linked to high levels of
A. Nitrogen B. Oxygen C. Air-borne dust particles D. All the above
29. Which type of waste management involves transforming garbage into a new or usable product?
A. Recycling B. Composting C. Incineration D. Landfilling
30. Alternative eco-friendly fuel for automobiles is
A. Petrol B. Diesel C. CNG D. Kerosene
31. The pH value of the acid rain water is less than
A. 5.7 B. 7.0 C. 8.5 D. 7.5
32. Acid rain has been increasing day by day due to
A. Urbanization B. industrialization
C. increase in vehicle population D. none of the above
33. Reduction in brightness of the famous Taj Mahal is due to
A. Global warming. B. Air pollution C. Ozone depletion D. Afforestation.
34. Ozone layer thickness is measured in
A. PPM B. PPB C. Decibels D. Dobson Units
35. Ozone layers absorbs
A. UV rays B. Infra-red rays C. Cosmic rays D. CO
36. World Ozone day is being celebrated on
A. September 5th B. October 15th C. September 16th D. September 11th
37. Which of the following factors contributes to the intensification of forest fires?
A. Lower temperatures B. Reduced insect activity
C. Warming temperatures and insect outbreaks D. Decreased precipitation in forests

38. Which major dam project in India is known for displacing nearly one lakh people with inadequate rehabilitation?
A. Sardar Sarovar Dam B. Bhakra Nangal Dam C. Tehri Dam D. Hirakud Dam
39. Which tissue(s) does fluoride concentrate in?
A. All soft tissues B. Blood and liver C. Bones and teeth D. Skin and nails
40. What is the optimum concentration of fluoride (F^-) in drinking water to prevent dental caries?
A. < 0.5 ppm B. 1 ppm C. 2-4 ppm D. > 4 ppm
41. The main objective of the Water (Prevention and Control of Pollution) Act, 1974, is to:
A. Regulate the use of groundwater B. Protect and improve the quality of water
C. Prevent waterborne diseases D. Promote rainwater harvesting
42. Which sections of the Water Act, 1974, deal with penalties for the failure to comply with pollution control measures?
A. Sections 10 and 12 B. Sections 33 and 41
C. Sections 25 and 26 D. Sections 5 and 7
43. Which section of the Air Act, 1981, deals with penalties for noncompliance?
A. Section 5 B. Section 21 C. Section 37 D. Section 12
44. Who is responsible for enforcing the Environmental Protection Act, 1986, at the state level?
A. State Pollution Control Boards B. District Magistrates
C. Forest Department D. Urban Development Authorities
45. The Solid Waste Management Rules, 2016, emphasize the use of which waste treatment method to reduce landfill dependency?
A. Open burning of waste B. Composting, recycling, and waste-to-energy plants
C. Incineration without segregation D. Dumping in unauthorized locations
46. The E-Waste (Management) Rules, 2022, introduce the concept of:
A. Extended Producer Responsibility (EPR) B. Centralized waste collection centres
C. Ban on electronic manufacturing D. Government-funded recycling plants
47. According to the 2022 rules, the recycling targets for producers are based on:
A. The weight of products sold in the previous financial year
B. The number of consumers serviced
C. The volume of waste collected from consumers
D. The cost of waste management services
48. According to the Biomedical Waste Management Rules, 2016, biomedical waste must be segregated into how many color-coded categories?
A. 2 B. 4 C. 6 D. 8
49. The Biomedical Waste Management Rules, 2016, prohibit the mixing of biomedical waste with:
A. Household waste B. Other hazardous waste
C. General municipal solid waste D. All of the above
50. A healthcare facility generating biomedical waste is required to submit an annual report to:
A. Ministry of Health and Family Welfare B. State Pollution Control Boards (SPCBs)
C. Local government authority D. District Magistrate

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