

ENV 201

B.Tech. IIIrd SEMESTER EXAMINATION, 2024-25

B.TECH

(Environment & Ecology)

(ME, CSE, ECE & IT)

AFFIX PRESCRIBED
RUBBER STAMP

Paper ID

(To be filled in the
OMR Sheet)

Date (तिथि) : _____

2103

अनुक्रमांक (अंकों में) :

Roll No. (In Figures) :

अनुक्रमांक (शब्दों में) :

Roll No. (In Words) : _____

Time : 1:30 Hrs.

समय : 1:30 घण्टे

Max. Marks : 75

अधिकतम अंक : 75

नोट : पुस्तिका में 50 प्रश्न दिये गये हैं, सभी प्रश्न करने होंगे। प्रत्येक प्रश्न 1.5 अंक का होगा।

Important Instructions :

1. The candidate will write his/her Roll Number only at the places provided for, i.e. on the cover page and on the OMR answer sheet at the end and nowhere else.
2. Immediately on receipt of the question booklet, the candidate should check up the booklet and ensure that it contains all the pages and that no question is missing. If the candidate finds any discrepancy in the question booklet, he/she should report the invigilator within 10 minutes of the issue of this booklet and a fresh question booklet without any discrepancy be obtained.

महत्वपूर्ण निर्देश :

1. अभ्यर्थी अपने अनुक्रमांक केवल उन्हीं स्थानों पर लिखेंगे जो इसके लिए दिये गये हैं, अर्थात् प्रश्न पुस्तिका के मुख्य पृष्ठ तथा साथ दिये गये ओ०एम०आर० उत्तर पत्र पर, तथा अन्यत्र कहीं नहीं लिखेंगे।
2. प्रश्न पुस्तिका मिलते ही अभ्यर्थी को जाँच करके सुनिश्चित कर लेना चाहिए कि इस पुस्तिका में पूरे पृष्ठ हैं और कोई प्रश्न छूटा तो नहीं है। यदि कोई विसंगति है तो प्रश्न पुस्तिका मिलने के 10 मिनट के भीतर ही कक्ष परिप्रेक्षक को सूचित करना चाहिए और बिना त्रुटि की दूसरी प्रश्न पुस्तिका प्राप्त कर लेना चाहिए।

1. 'Sustainable development' means -

- (A) Meeting present needs without compromising on future needs
- (B) Progress of human beings
- (C) Balance between human needs and the ability of earth to provide the resources
- (D) All of the above

2. Which article in constitution states that "It is the duty of every citizen of India to protect and improve the natural environment, including lakes, rivers, forests, and wildlife" ?

- (A) Article 48A
- (B) Article 51A(g)
- (C) Article 52
- (D) Article 42

3. How many sections and chapters are there in Environment Protection Act 1986 ?

- (A) 26 sections and 4 chapters
- (B) 31 sections and 7 chapters
- (C) 52 sections and 4 chapters
- (D) 2 sections and only one chapter

4. The zone in which two ecosystems are united is known as -

- (A) Habitat
- (B) Green zone
- (C) Ecotone
- (D) None of these

5. Physical and chemical components of an ecosystem constitute -
- (A) Biotic structure
 - (B) Abiotic structure
 - (C) Both (A) and (B)
 - (D) None of these
6. The first of the major environmental protection act to be promulgated in India was -
- (A) Water Act
 - (B) Air Act
 - (C) Environmental Act
 - (D) Noise Pollution Act
7. The water (Prevention and control of pollution) Act was enacted in the year -
- (A) 1986
 - (B) 1974
 - (C) 1994
 - (D) 1975
8. Noise pollution has been inserted as pollution in the Air Act in -
- (A) 1981
 - (B) 1987
 - (C) 1982
 - (D) 1985

9. The power to declare an area as a Sanctuary or national park of central government is wildlife (Protection) Act is under -
- (A) Section 38
 - (B) Section 39
 - (C) Section 18
 - (D) Section 27
10. Study of trends in human population growth and prediction of future growth is called -
- (A) Kalography
 - (B) Biography
 - (C) Demography
 - (D) Trendography
11. Fossil fuel and metallic minerals are -
- (A) Renewable resources
 - (B) Inexhaustible resources
 - (C) Non – renewable resources
 - (D) None of these
12. Khetri (Rajasthan) is famous for -
- (A) Coal mines
 - (B) Copper mines
 - (C) Granite stone
 - (D) Marble stone

13. What is the percentage of forest area in India ?

(A) 25.34%

(B) 21.71%

(C) 30.02%

(D) 30%

14. Extensive planting of trees to increase cover is called -

(A) Afforestation

(B) Deforestation

(C) Agroforestation

(D) Both (B) & (C)

15. Which among the following is a sedimentary type of cycle ?

(A) Sulphur cycle

(B) Oxygen cycle

(C) Nitrogen cycle

(D) Carbon cycle

16. A food web consist of -

(A) Interlocking of food chains

(B) Producers, consumers and decomposers

(C) A portion of a food chain

(D) A set of similar consumers

17. The desert among the following which is not a cold desert is ?
- (A) Golbi desert
 - (B) Patagonian desert
 - (C) Atacama desert
 - (D) Majava desert
18. The darker zone in lakes where light penetration is negligible is called the -
- (A) Littoral zone
 - (B) Euphotic zone
 - (C) Limnetic zone
 - (D) Benthic zone
19. Social, economical and ecological equity is the necessary condition for achieving -
- (A) Social development
 - (B) Economical development
 - (C) Sustainable development
 - (D) Ecological development
20. Which of the following types of coal has maximum carbon and calorific value ?
- (A) Hard coal
 - (B) Soft coal
 - (C) Brown coal
 - (D) Wood coal

21. Nuclear energy can be generated by -
- (A) Nuclear fission
 - (B) Nuclear fusion
 - (C) Both of these
 - (D) None of these
22. 'Production of hydrogen' is possible by which process ?
- (A) Thermal dissociation of water
 - (B) Photolysis of water
 - (C) Electrolysis of water
 - (D) All of the above
23. The efficiency of energy flow in the ecosystem is about -
- (A) 0.1%
 - (B) 10%
 - (C) 0.5%
 - (D) > 50%
24. The primary producer of a pond ecosystem is -
- (A) Zooplankton
 - (B) Red algae
 - (C) Phytoplankton
 - (D) Floating species

25. The number of babies produced per thousand individuals is called -

- (A) Natality
- (B) Mortality
- (C) Immigration
- (D) Emigration

26. Which of the following is an air pollutant ?

- (A) Nitrogen (N_2)
- (B) Carbon dioxide (CO_2)
- (C) Carbon monoxide (CO)
- (D) Oxygen (O_2)

27. Which of the following is a secondary air pollutant ?

- (A) Ozone
- (B) Carbon dioxide
- (C) Carbon monoxide
- (D) SO_2

28. Disease caused by eating fish inhabiting mercury contaminated water is -

- (A) Bright's disease
- (B) Osteosclerosis
- (C) Fluorosis
- (D) Mina - mata disease

29. Sound becomes hazardous noise pollution at decibels -
- (A) Above 80
 - (B) Above 30
 - (C) Above 100
 - (D) Above 120
30. High level radioactive waste can be managed in which of the following ways ?
- (A) Open dumping
 - (B) Composting
 - (C) Incineration
 - (D) Dumping in sealed containers
31. Biomedical waste may be disposed off by -
- (A) Autoclaving
 - (B) Land filling
 - (C) Both (A) and (B)
 - (D) Incineration
32. Which of the following groups of plants can be used as indicators of SO₂ pollution of air ?
- (A) Epiphytic lichens
 - (B) Ferns
 - (C) Liver worts
 - (D) Horn worts

33. Which of the following on inhalation dissolved in the blood hemoglobin more rapidly than oxygen ?
- (A) SO_2
 - (B) CO
 - (C) O_3
 - (D) Nitrous oxide
34. Which of the following are likely to be present in photochemical smog ?
- (A) Sulphur dioxide
 - (B) Photochemical oxidants
 - (C) Chlorofluorocarbon
 - (D) Smog
35. Which of the following devices is suitable for the removal of gaseous pollutants ?
- (A) Cyclone separator
 - (B) Electrostatic precipitator
 - (C) Fabric filter
 - (D) Wet scrubber
36. BOD measures -
- (A) Industrial Pollution
 - (B) Air Pollution
 - (C) Noise Pollution
 - (D) Dissolved O_2 needed by microbes to decompose organic waste

37. Fluoride pollution mainly affects -

- (A) Brain
- (B) Heart & Kidney
- ✓(C) Teeth & Bones
- (D) All of the above

38. Air pollution from automobiles can be controlled by fitting -

- (A) Catalytic converter
- (B) Wet scrubber
- (C) Electrostatic precipitator
- (D) None of them

39. Photovoltaic energy is the conversion of sunlight into -

- (A) Electricity
- (B) Geothermal energy
- (C) Biogas
- (D) Chemical energy

40. Horizontal axis and vertical axis are the types of -

- (A) Nuclear reactor
- (B) Wind mills
- (C) Biogas reactor ✓
- (D) Solar cell ✓

41. Literate woman can help in -
- (A) Reducing infant mortality rate
 - (B) Reducing population growth
 - (C) Promoting female children Education
 - (D) All of the above
42. First International conference on "Wetland Conservation" was held in -
- (A) Ramsagar
 - (B) Ramsar
 - (C) Ramsahar
 - (D) Stockholm
43. Leader of "Narmada Bachao Andolan" -
- (A) Medha Patkar
 - (B) Vandana Siva
 - (C) Maneka Gandhi
 - (D) None of the above
44. The provisions for environmental protection in the constitution were made in -
- (A) 1976
 - (B) 1950
 - (C) 1982
 - (D) 1960

45. A fuel cell in order to produce electricity, burns -
- (A) Helium
 - (B) Nitrogen
 - (C) Hydrogen
 - (D) Oxygen
46. Crude oil is -
- (A) Colour less
 - (B) Odour less
 - (C) Smelly yellow to black liquid
 - (D) Odour less & colour less both
47. - The term 'Ecology' was introduced by -
- (A) Haeckel
 - (B) Odum
 - (C) Tansley
 - (D) Ramdeo
48. The study of interactions between living and non - living organism and environment is called -
- (A) Ecosystem
 - (B) Ecology
 - (C) Phyto - geography
 - (D) None of them

49. Which one is the correct food chain ?

- (A) Phytoplankton → Zooplankton → Fish
- (B) Zooplankton → Phytoplankton → Fish
- (C) Zooplankton → Protozoans → Fish
- (D) Grass → Fish → Zooplankton

50. BTU is measurement of -

- (A) Volume
- (B) Area
- (C) Temperature
- (D) None of them

