

COURSE CODE: MEV001
POST GRADUATE DIPLOMA IN
ENVIRONMENTAL AND OCCUPATIONAL
HEALTH (PGDEOHOL)
PROGRAMME CODE: PGDEOHOL
INTRODUCTION TO ENVIRONMENTAL HEALTH

Total Marks-50

Time Duration-90 Minutes

Note : (i) All questions are compulsory.

(ii) Each question carries 1 mark.

1. Which one of the following statements is false?
 - A) Global warming is the rise in the average temperature of the earth's climate system.
 - B) Eutrophication is observed in water bodies.
 - C) The green house effect is a natural phenomenon.
 - D) Ozone is harmless to breathe.

2. What is the main purpose of measuring BOD?
 - A) Estimating the types of microbes.
 - B) Determining the level of dissolved oxygen.
 - C) Estimating the quantity of organic matter in sewage water.
 - D) None of the above

3. Which of the following was used to evaluate the health of an ecosystem?
 - A) Decomposers
 - B) Predators
 - C) Bio-remediators

D) Bio-indicators

4. Detrimental impact of ozone layer destruction on human health is:

- A) Skin cancer
- B) Osteoporosis
- C) Dyspepsia
- D) All of the above

5. Which of the following greenhouse gases absorb and emit infrared radiation?

- A) Nitrogen
- B) Ozone
- C) Argon
- D) Sulphur

6. Lichens are good bioindicators for:

- A) Radiation
- B) Soil pollution
- C) Water and air pollution
- D) Noise pollution

7. The presence of the following in a water body is an indicator of water pollution:

- A) Zygosporangium
- B) Cystin
- C) E. coli
- D) None of the above

8. The primary agenda of the Kyoto Protocol is:

- A) Hazardous waste regulation
- B) Regulate nuclear energy production
- C) Control anthropogenic sources of green house gases
- D) Water pollution

9. What is affected by eutrophication?

- A) Dissolved CO₂
- B) Dissolved O₂
- C) Dissolved SO₂
- D) Dissolved nutrients

10. Which one of the following is the cause of gastrointestinal disease?

- A) Chromium
- B) Cadmium
- C) Sodium
- D) Selenium

11. Which of the following describes the environmentally responsible disposal of municipal solid waste?

- A) Burnt to completion
- B) Dumped in sanitary landfills
- C) Sorted and treated into bio-degradable, non-bio-degradable and recyclable waste separately
- D) Dumped in open wasteland

12. The name of the zone that extends upto 50 km above the troposphere is:

- A) Thermosphere
- B) Troposphere
- C) Stratosphere
- D) Mesosphere

13. Gas from rice fields that contributes to global warming is:

- A) Methane
- B) Chlorine
- C) CO₂
- D) SO₂

14. Which of the following is incorrect?

- A) Formaldehyde — Carcinogenic
- B) Acid rain — NH_4NO_3
- C) SO_2 — Respiratory problems
- D) Nitrogen oxide — Brown air

15. Which of the following is a secondary pollutant?

- A) HNO_3
- B) Cl_2
- C) NO_2
- D) Br_2

16. How much noise can permanently damage eardrums and impair hearing?

- A) 10 dB
- B) 15 dB
- C) 150 dB
- D) 90 dB

17. Atmospheric air is a mixture of:

- A) Nitrogen and Oxygen
- B) Nitrogen and CO_2
- C) Only Oxygen
- D) Many gases and suspended liquid droplets

18. The gaseous percentage in the atmosphere is:

- A) Abnormal
- B) High
- C) Constant
- D) Abnormally low

19. Which of the following statements about the mesosphere is not correct?

- A) Temperature increases with increasing heights.

- B) Mesopause is the top of the mesosphere.
- C) It is above the stratosphere.
- D) It is the third layer of the atmosphere.

20. Heterotrophic organisms are:

- A) Algae
- B) Bacteria
- C) Herbivores
- D) Green plants

21. Coal, limestone and petroleum are related to:

- A) Carbon cycle
- B) Oxygen cycle
- C) Nitrogen cycle
- D) Phosphorus cycle

22. Which of the following begins the food chain?

- A) Decay
- B) Photosynthesis
- C) Nitrogen fixation
- D) Respiration

23. The carbon cycle and phosphorus cycle differ from one another in which of the following?

- A) The carbon cycle has a gaseous phase while the phosphorus cycle does not.
- B) Unlike carbon, phosphorus does not enter living things.
- C) A solid phase is part of the phosphorus cycle but not the carbon cycle.
- D) The atmosphere serves as the primary reservoir for the phosphorus cycle where as rocks for the carbon cycle.

24. Which one of the following statements is correct?

- A) Noise pollution alters the landscape of tress.

- B) Noise will not affect wildlife.
- C) Noise pollution will not disturb the marine life.
- D) None of the above

25. Which of the following pyramids represents the total dry weight of the total amount of living matter at each level?

- A) Pyramid of energy
- B) Pyramid of biomass
- C) Pyramid of numbers
- D) Pyramid of age

26. Which of the following pyramids is always upright?

- A) Pyramid of age
- B) Pyramid of numbers
- C) Pyramid of biomass
- D) Pyramid of energy

27. Biogeochemical cycles are known as:

- A) Gaseous cycle
- B) Material cycle
- C) Sedimentary cycle
- D) Nitrogen cycle

28. When energy flows through an ecosystem, there is always a as heat.

- A) Gain in energy
- B) Energy flow
- C) Loss of energy
- D) Loss and gain in energy

29. The ratio between the energy assimilated and the energy used within trophic levels of food chain is:

- A) Exploitation efficiency

- B) Assimilation efficiency
- C) Net production
- D) Ecological efficiency

30. Photochemical smog is a mixture of:

- A) HNO_3 and H_2SO_4
- B) HCl and HNO_3
- C) NO_x and VOC
- D) O_3 and CO_2

31. Which of the following tools provides information on air quality in India?

- A) Air quality management system
- B) National air quality index
- C) National ambient air quality standard
- D) Air pollution modeling

32. Which of the vehicular pollutants can harm human health even at relatively low amounts?

- (1) Nitrogen oxides
- (2) Carbon monoxide
- (3) CO_2
- (4) Benzene

Codes :

- A) 1 and 4
- B) 1 and 2
- C) 1 and 3
- D) 1, 2 and 4

33. In global warming the temperature increases in:

- A) Troposphere
- B) Ionosphere
- C) Mesosphere

D) Stratosphere

34. What are persistent organic pollutants?

A) Organic manure

B) Weed

C) Sand

D) Chemicals

35. Soil resistance can increase against erosion by:

A) maintaining the water inflow

B) maintaining the physical structure of soil

C) maintaining the environmental conditions

D) increasing the manure given to the plants

36. When did the Water Cess Act become effective?

A) 1977

B) 1973

C) 1975

D) 1980

37. Formation of London smog takes place in:

A) Winter during day time

B) Winter during morning time

C) Summer during morning time

D) Summer during day time

38. Which one of the following is a photochemical oxidant?

A) Hydrogen peroxide

B) Nitrogen oxide

C) Ozone

D) Peroxyacetyl nitrate

39. The municipal solid waste is:

- A) Non-hazardous
- B) Toxic
- C) Radioactive
- D) Hazardous

40. Which of the following causes mutations at a very high rate?

- A) Automobile exhaust
- B) Radiation
- C) Fertilizer
- D) Industrial emission

41. Which of the following is the physical monitoring of the lake?

- A) pH
- B) COD
- C) BOD
- D) Turbidity

42. The majority of carbon moves from the lithosphere to the atmosphere by:

- A) Burning of fossil fuel
- B) Erosion
- C) Deposition
- D) Weathering

43. Photochemical reactions are followed by this principle:

- A) Grotthus-Draper's law
- B) Lambert's law
- C) Ion equation method
- D) Checklist analysis

44. Formation of free radicals is an example of:

- A) Primary photochemical reaction

- B) Secondary photochemical reaction
- C) Redox reaction
- D) Oxidation reaction

45. CFC's have a continuing effect on the ozone layer as:

- A) These are effectively absorbed by water vapour.
- B) Production increases due to their presence.
- C) Chlorine atoms formed by these only act as catalyst in reactions causing depleting of the ozone.
- D) Chlorine atoms formed by them are used up in reactions causing degradation of the ozone.

46. Which nuclear radiations can penetrate through the human body?

- A) X-ray
- B) CT
- C) Gamma radiation
- D) Beta rays

47. Which of the following factors will influence the global warming potential?

- A) Absorption capability of IR radiation
- B) Atmospheric lifetime
- C) Range of IR wavelength it can absorb
- D) All of the above

48. Which one of the following is a sink for carbon?

- A) Oceans
- B) Wetlands
- C) Oil fields
- D) All of the above

49. Industrial sectors having pollution index score above 60 is:

- A) White category

- B) Red category
- C) Yellow category
- D) Brown category

50. The vertical movement of air due to atmospheric heating and cooling is termed as:

- A) Convection
- B) Precipitation
- C) Buffering
- D) Deposition