



BRAINWARE UNIVERSITY

Term End Examination 2021 - 22
Programme – Bachelor of Optometry
Course Name – Environmental Science
Course Code - EVS201
(Semester II)

Time allotted : 1 Hrs.30 Min.

Full Marks : 75

[The figure in the margin indicates full marks.]

Group-A

(Multiple Choice Type Question)

1 x 75=75

Choose the correct alternative from the following :

- (1) Incineration is a disposal method of

a) Water pollutant	b) Air pollutant
c) Solid waste	d) Noise pollutant
- (2) Which one is secondary pollutant?

a) Smog	b) PAN
c) Ozone	d) All of these
- (3) The name of the disease that occurs due to mercury pollution is

a) Minamata disease	b) Skin cancer
c) Ouch ouch disease	d) Kidney damage
- (4) Montreal Protocol is related to

a) Land pollution	b) Noise Pollution
c) Production and use of CFCs	d) Increase of population
- (5) Water is called polluted when DO level drops below

a) 5ppm	b) 8ppm
c) 10ppm	d) 15ppm
- (6) The abnormal growth and activities of a cell may cause

a) Cancer	b) Typhoid
c) Cholera	d) Malaria
- (7) Ozone acts as a protective shield when it resides in

a) Mesosphere	b) Stratosphere
c) Thermosphere	d) Troposphere

- (8) The audio range of human is
 a) 20-20,000 Hz
 b) 200-20,000 Hz
 c) 2000-5000 Hz
 d) 500-5500 Hz
- (9) A biotic factor of eco-system is
 a) Sunlight
 b) Soil
 c) Wind
 d) Tree
- (10) Hydrosphere consists of
 a) Air layer
 b) Rocks
 c) Soil
 d) Water bodies and oceans
- (11) Green House gas is
 a) Carbon monoxide
 b) Water vapour
 c) Nitrous oxide
 d) All of these
- (12) Ozone hole in Antarctica is due to
 a) Methane
 b) CFC
 c) Carbon dioxide
 d) Nitrogen
- (13) Grassland ecosystem is occupied by nearly..... of Earth surface
 a) 21%
 b) 50%
 c) 70%
 d) 80%
- (14) The most potentially renewable energy resource is
 a) Sunlight
 b) Wind
 c) Tidal energy
 d) Biomass
- (15) The coldest region of atmosphere is
 a) Troposphere
 b) Ionosphere
 c) Mesosphere
 d) Stratosphere
- (16) Kyoto Protocol is related to
 a) Ozone layer depletion
 b) Green house gases
 c) SPM
 d) Water pollution
- (17) Itai itai disease occurs due to
 a) Arsenic pollution
 b) Lead pollution
 c) Mercury pollution
 d) Cadmium pollution
- (18) Which one is primary pollutant?
 a) Carbon monoxide
 b) PAN
 c) Ozone
 d) Smog
- (19) Lithosphere means
 a) Air
 b) Organisms
 c) Water
 d) Rocks and soils
- (20) The loss of chlorophyll causing yellowing of leaf is
 a) Chlorosis
 b) Chlorolysis
 c) Photosynthesis
 d) Cholera
- (21) pH of the acid rain varies between
 a) 3-6
 b) 9-11
 c) 11-14
 d) 6-9

- (22) A lake rich of nutrient is called
- a) Oligotrophic lake
 - b) Mesotrophic lake
 - c) Eutrophic lake
 - d) Aziotrophic lake
- (23) The hottest region of the atmosphere is
- a) Troposphere
 - b) Ionosphere
 - c) Mesosphere
 - d) Stratosphere
- (24) World Environment Day is observed every year on
- a) June 5
 - b) July 5
 - c) August 5
 - d) September 5
- (25) Maintaining and judiciously using the environment for human purposes is called
- a) Conservation of atmosphere
 - b) Maintenance of environment
 - c) Maintenance of atmosphere
 - d) Conservation of environment
- (26) The noise threshold limit values for 16 hours is
- a) 80 dB
 - b) 100 dB
 - c) 90 dB
 - d) 110 dB
- (27) A young 18 year old person has the audio range between
- a) 20-20000 Hz
 - b) 30-30000 Hz
 - c) 40-40000 Hz
 - d) 50-50000 Hz
- (28) A person might be killed if the sound is
- a) 120 dB
 - b) 140 dB
 - c) 130 dB
 - d) 150 dB
- (29) What is the name of instrument by which sound can measure in dB?
- a) Sound level meter
 - b) Viscometer
 - c) Thermometer
 - d) Sound pressure meter
- (30) The physical component of eco-system is
- a) Carbon
 - b) Light
 - c) Oxygen
 - d) Nitrogen
- (31) Forest mainly have
- a) Protective function
 - b) Productive function
 - c) Accessory function
 - d) All of these
- (32) Which pyramid is always an upright one?
- a) Pyramid of energy
 - b) Pyramid of number
 - c) Pyramid of biomass
 - d) Pyramid of number and biomass
- (33) The Montreal protocol is related to
- a) Land pollution
 - b) Atmospheric pollution
 - c) Water pollution
 - d) Noise pollution
- (34) The maximum quantity of fresh water occurs in
- a) Rivers
 - b) Ground water
 - c) Polar ice caps and glaciers
 - d) Sea water
- (35) Which one of the following can be used for disinfection of water?
- a) Chlorine
 - b) Ozone
 - c) Hydrogen peroxide
 - d) Both chlorine and ozone

- (36) Eutrophication means
- a) Thermal change of water
 - b) Filling up of water bodies with aquatic plants due to extra nutrient
 - c) Filling up of water bodies with aquatic plants due to less nutrient
 - d) Solid waste
- (37) Greenhouse effect is due to
- a) Over cultivation of land
 - b) Testing nuclear weapons
 - c) Some atmospheric gases like CO₂, N₂O and some man-made gases
 - d) Soil pollution
- (38) BOD means
- a) Biological oxygen demand
 - b) Biochemical oxygen demand
 - c) Biggest oxygen demand
 - d) Bio oxygen dissolved
- (39) Which one of the following ozones is harmful to public health?
- a) Stratospheric ozone
 - b) Tropospheric ozone
 - c) Laboratory ozone
 - d) Lithospheric ozone
- (40) Which of the following is not biodegradable?
- a) Polythene
 - b) Cotton
 - c) Vegetable waste
 - d) Wood
- (41) Contaminated water causes disease due to
- a) Increase of pathogens
 - b) Increase of BOD
 - c) Increase of COD
 - d) Increase of DO
- (42) The important component of environment is
- a) Biosphere
 - b) Lithosphere
 - c) Atmosphere
 - d) All of these
- (43) Biotic factor is related to
- a) Living organisms
 - b) Non living organisms
 - c) Both living and nonliving organisms
 - d) Fungus
- (44) Energy flow in an ecosystem is
- a) Unidirectional
 - b) Cyclic
 - c) May be unidirectional or cyclic depending on condition
 - d) Can not be said
- (45) The main component of photochemical smog
- a) Water vapour
 - b) Sulphur dioxide
 - c) Oxides of nitrogen
 - d) Chlorine
- (46) The main pathogen present in contaminated water is
- a) Bacteria
 - b) Algae
 - c) Protozoa
 - d) All of these
- (47) The most toxic chemical as carcinogen is
- a) Carbon tetrachloride
 - b) Vinyl chloride
 - c) Tetrachloro ethylene
 - d) Trichloro ethylene
- (48) Hazardous waste should have characteristics
- a) Reactivity
 - b) Corrosivity
 - c) Toxicity
 - d) All of these

- (49) The best method of disposal of nonhazardous solid waste is
- | | |
|-----------------|--------------------------|
| a) Open dumping | b) Sanitary land filling |
| c) Incineration | d) Composting |
- (50) The various factors of environment are
- | | |
|----------------------|--------------------|
| a) Physical factor | b) Chemical factor |
| c) Biological factor | d) All of these |
- (51) Examples of second trophic level organism is
- | | |
|----------|---------------|
| a) Plant | b) Small fish |
| c) Tiger | d) Lion |
- (52) Sound wave is an example of
- | | |
|-------------------------|----------------------|
| a) Transverse wave | b) Longitudinal wave |
| c) Electromagnetic wave | d) Static wave |
- (53) Example(s) of conventional type of renewable resources may be
- | | |
|----------------|-----------------|
| a) Plant | b) Wildlife |
| c) Aquaculture | d) All of these |
- (54) The unit of measuring hardness is
- | | |
|---------------|-------------|
| a) ppm | b) gm/litre |
| c) mole/litre | d) mole/kg |
- (55) By using photovoltaic cell solar energy can be converted into
- | | |
|----------------------|----------------------|
| a) Thermal energy | b) Mechanical energy |
| c) Electrical energy | d) Wind energy |
- (56) The example of primary consumer is
- | | |
|----------|----------|
| a) Plant | b) Cow |
| c) Tiger | d) Snake |
- (57) The Sunderban mangrove forest in west Bengal is located in the district of
- | | |
|--------------|----------------|
| a) Miidnapur | b) Birbhum |
| c) Nadia | d) 24 parganas |
- (58) Aircraft noise is measured by
- | | |
|----------------------------|-------------|
| a) L_{10} (18 hrs) index | b) L_{eq} |
| c) L_{epn} | d) L_{aq} |
- (59) The temperature range of troposphere is
- | | |
|-----------------|-------------------|
| a) -2 to -92 °C | b) 15 to -56 °C |
| c) -56 to -2 °C | d) -92 to 1200 °C |
- (60) Density of water is maximum at
- | | |
|-----------|-----------|
| a) 0 °C | b) 4 °C |
| c) 100 °C | d) - 4 °C |
- (61) With increase in temperature the DO in water
- | | |
|-----------------|-------------------------|
| a) Decreases | b) Increases |
| c) Remains same | d) Can not be predicted |
- (62) Which of the following type(s) of Personal Protective Equipment (PPE) is frequently used?
- | | |
|-------------------|-----------|
| a) Safety glasses | b) Gloves |
|-------------------|-----------|

- c) Lab Coats
- (63) The species used as screening of chemicals.
- a) Zebra fish
- c) *Enchytraeus albidus*
- (64) Eco-toxicology is the study of
- a) Physical interactions of organism and environment
- c) Biological interactions of organism and environment
- (65) Which of the following air pollution control device has maximum efficiency?
- a) Spray tower
- c) Dynamic precipitator
- (66) What is Neutron ray?
- a) They are produced in UV rays
- c) They are produced in Gamma ray chamber
- (67) Which of the following is pathological waste product?
- a) Blood
- c) Saline
- (68) What do you mean by Genotoxic Waste?
- a) Any drugs
- c) Chemotherapeutic drugs
- (69) What is medical waste?
- a) Medical instruments
- c) By-product of healthcare work
- (70) Which of the following is carcinogenic pollutant?
- a) Methyl ring containing compounds
- c) Hydrocarbons
- (71) Sick building syndrome occurs in
- a) Students
- c) Traveler
- (72) From which component pollution occurs in Histopathology Laboratory?
- a) Wax
- c) Stains and dyes
- (73) APTI is highest among these medicinal plants- *Bauhinia variegata*, *Syzygium cumini*, *Embllica officinalis*, *Phyllanthus acidus*, *Aegle marmelos*, *Prosopis cineraria*, and *Vitex negundo* and five fruit plant species such as *Psidium guajava*, *Artocarpus heterophyllus*, *Manilkara zapota*, *Punica granatum*, and *Carica papaya* -
- a) *Embllica officinalis*
- c) *Artocarpus heterophyllus*
- (74) What do you mean by APTI?
- a) Air Pollution Time Index
- c) Air Pollution Technical Index
- d) All of the options are true
- b) *Folsomia candida*
- d) Cat Fish
- b) Thermal interactions of organism and environment
- d) Chemical interactions of organism and environment
- b) Wet cyclonic scrubber
- d) Electrostatic precipitator
- b) They are produced in atoms bombs and nuclear reactors.
- d) They are produced in hospitals
- b) Chemicals used in hospital
- d) Blood and stains
- b) Cytotoxic drugs
- d) All medicines
- b) Chemicals used in hospital
- d) Plastics
- b) Polycyclic aromatic hydrocarbon
- d) Aromatic compounds
- b) Office workers
- d) Common people
- b) Fixatives
- d) Specimen and Formaline
- b) *Syzygium cumini*
- d) All statements are false
- b) Air Pollution Type Index
- d) Air Pollution Tolerance Index

(75) The common cause of air pollution is

- a) Automobile pollution
- c) Water pollution

- b) Noise
- d) CO₂ exhaustion from body