



# BRAINWARE UNIVERSITY

**Term End Examination 2021 - 22**

**Programme – Bachelor of Science in Critical Care Technology**

**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 CO<sub>2</sub>, N<sub>2</sub>O 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) CO<sub>2</sub> exhaustion from body