



BRAINWARE UNIVERSITY

Term End Examination 2023-2024

Programme – B.Sc.(BT)-Hons-2021

Course Name – Environmental Biotechnology

Course Code - BBTD601C

(Semester VI)

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

- (i) Conventional sources of energy are
- | | |
|----------------|-----------------|
| a) Coal | b) Petroleum |
| c) Natural Gas | d) All of these |
- (ii) The process of burning waste in large furnaces at high temperature is known as
- | | |
|---------------|-----------------|
| a) Burial | b) Incineration |
| c) Flammation | d) All of these |
- (iii) Choose the most appropriate option
Symbiotic bacteria is
- | | |
|-----------------|------------------|
| a) Rhizobium | b) Anabena |
| c) Both a and b | d) None of these |
- (iv) Identify the exhaustible natural resource.
- | | |
|-------------------|--------------------|
| a) Wildlife | b) Minerals |
| c) Soil fertility | d) Aquatic animals |
- (v) Renewable energy often replaces conventional fuels in which of the following areas
- | | |
|---------------------------|------------------|
| a) Locomotives | b) Space heating |
| c) Electricity generation | d) All of them |
- (vi) Choose incineration as a disposal method of
- | | |
|--------------------|------------------|
| a) Water Pollutant | b) Air Pollutant |
| c) Solid Waste | d) None of These |
- (vii) Sustainable development describes
- | | |
|---|-----------------------------|
| a) Meeting present needs without compromising on future needs | b) progress of human beings |
| c) balance between human needs and earth resources | d) all of them |
- (viii) Define the term BOD.

- a) A measure of organic matter present in water
 b) Usually less than COD
 c) Biochemical oxygen demand
 d) All of the them
- (ix) Identify which one of the following ozones is harmful to public health
 a) Stratospheric ozone
 b) Tropospheric ozone
 c) Laboratory ozone
 d) Lithospheric ozone
- (x) Which of the following is not biodegradable
 a) Polythene
 b) Cotton
 c) Vegetable waste
 d) Wood
- (xi) Choose which group is responsible for recycling of nutrients?
 a) Autotrophs
 b) Heterotrophs
 c) Saprotrophs
 d) All of them
- (xii) Which of the following is biodegradable?
 a) Paper
 b) D.D.T
 c) Plastic
 d) Aluminium
- (xiii) Which is the renewable exhaustible natural energy resource?
 a) Coal
 b) Petroleum
 c) Kerosene
 d) Biomass
- (xiv) Which statement is correct with respect to the food chain?
 a) Every component of food chain forms trophic level
 b) Every component of food chain forms trophic level
 c) All the chains formed by nutritional relations is used to understand energy flow.
 d) All of these
- (xv) Interpret which of the following is a biodegradable waste?
 a) Plastics
 b) Polythene
 c) Glass
 d) None of these

Group-B

(Short Answer Type Questions)

3 x 5=15

2. Explain the term bioaugmentation with examples. (3)
 3. Describe bioremediation. (3)
 4. Identify two importance of phytoremediation, and state one important limitation? (3)
 5. State the advantages of using modern fuels. (3)
 6. Compose the list of sources of municipal solid waste management (3)

OR

- Compile petrochemicals with examples. (3)

Group-C

(Long Answer Type Questions)

5 x 6=30

7. Summarize the impact of coal and petroleum oil on the environment. (5)
 8. Write short note on biogas. (5)
 9. Elaborate bioleaching with examples. (5)
 10. Classify non-renewable sources of energy (5)
 11. Classify pesticides used in different agricultural crops. (5)
 12. Evaluate the different benefits of GM crops. (5)

OR

- Determine the affect of GM crops on environment. (5)
