

Exam

Select only one answer from the options provided

1. **Biotechnology can be defined as:**
 - a) The study of ecology only
 - b) The use of living organisms or their components for practical applications
 - c) The study of chemistry reactions
 - d) The use of machines in industry
2. **Which of the following is an example of traditional biotechnology?**
 - a) PCR
 - b) Genetic engineering
 - c) Bread and yogurt production
 - d) DNA sequencing
3. **Which organism is widely used in biotechnology?**
 - a) Viruses
 - b) Plants
 - c) Microorganisms
 - d) Mammals
4. **Recombinant DNA technology allows:**
 - a) DNA destruction
 - b) DNA replication
 - c) DNA modification and insertion
 - d) Protein digestion
5. **PCR is mainly used to:**
 - a) Destroy DNA
 - b) Amplify DNA
 - c) Translate RNA
 - d) Produce proteins
6. **Biotechnology contributes to sustainable development by:**
 - a) Increasing pollution
 - b) Using renewable resources
 - c) Eliminating biodiversity
 - d) Increasing fossil fuel use
7. **Bioremediation uses:**
 - a) Chemicals
 - b) Physical methods
 - c) Living organisms
 - d) Mechanical systems
8. **Phytoremediation uses:**
 - a) Animals
 - b) Plants
 - c) Fungi
 - d) Viruses
9. **Land farming is used to treat soils contaminated by:**
 - a) Plastics
 - b) Petroleum hydrocarbons
 - c) Salts
 - d) Fertilizers
10. **Condensation polymerization releases:**
 - a) Oxygen
 - b) Water

- c) Carbon dioxide
- d) Nitrogen
- 11. **A key property of biomaterials is:**
 - a) Toxicity
 - b) Biocompatibility
 - c) Radioactivity
 - d) Fragility
- 12. **Third-generation biofuels are based on:**
 - a) Crops
 - b) Agricultural waste
 - c) Algae
 - d) Coal
- 13. **Pasteurization aims to:**
 - a) Destroy all microorganisms
 - b) Reduce microbial load
 - c) Freeze food
 - d) Dry food
- 14. **Nisin is an example of:**
 - a) Antibiotic drug
 - b) Chemical preservative
 - c) Bacteriocin
 - d) Hormone
- 15. **Bioplastics are:**
 - a) Non-degradable
 - b) Derived from petroleum
 - c) Biodegradable materials
 - d) Metallic polymers
- 16. **Biofiltration is mainly used for:**
 - a) Soil depollution
 - b) Air depollution
 - c) Food processing
 - d) Drug production
- 17. **Fermentation is a process used for:**
 - a) Food spoilage
 - b) Food preservation
 - c) Food destruction
 - d) Food drying
- 18. **Antioxidant activity helps to:**
 - a) Increase oxidation
 - b) Neutralize free radicals
 - c) Destroy cells
 - d) Increase inflammation
- 19. **Methanization is a process that occurs under:**
 - a) Aerobic conditions
 - b) Anaerobic conditions
 - c) Sterile conditions
 - d) High pressure only
- 20. **Which organism is used to produce insulin?**
 - a) Virus
 - b) *E. coli*
 - c) Yeast
 - d) Algae

Good Luck