

**B.Sc. MICROBIOLOGY  
SIXTH SEMESTER  
BIOSAFETY & IPR  
BMB-604**



[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs.

Full Marks: 70

Time: 30 mins.

Marks: 20

( Objective )

*Choose the correct answer from the following:*

*1 × 20 = 20*

1. The full form of LMO is:
  - a. Live Modified Organism
  - b. Latent Modified Organism
  - c. Living Modified Organism
  - d. Least Modified Organism
2. Biosafety is working safety with biological material or organisms with potential to cause disease in:
  - a. Animals
  - b. Humans
  - c. Plants
  - d. All of the above
3. Golden rice is a genetically modified crop plant where the incorporated genes are meant for biosynthesis of:
  - a. Vitamin A
  - b. Vitamin C
  - c. Vitamin B
  - d. Beta carotene
4. Invention means:
  - a. New product having inventive step and are capable of industrial application
  - b. New product or process having inventive steps and capable of industrial application
  - c. New process
  - d. None of the above
5. AERB was constituted by:
  - a. Prime Minister of India
  - b. President of India
  - c. Chief Minister of States
  - d. Governor of States
6. The AERB was established in:
  - a. November 1983
  - b. September 1983
  - c. November 1980
  - d. November 1986
7. "Exclusive licence" mean:
  - a. A licence from a patentee which confers on the licensee
  - b. A licence from the Patent registrar
  - c. A licence under Patent Cooperation Treaty
  - d. None of the above
8. Types of Patent Applications permissible in India:
  - i) Ordinary Application ii) Convention Application iii) PCT National Phase Application iv) Divisional Application v) Patent of Addition
  - a. Only ii and iii
  - b. i and iii
  - c. Only i
  - d. All

9. Patent is a.....
- |                          |                              |
|--------------------------|------------------------------|
| a. Transferable property | b. Negotiable property       |
| c. Real property         | d. Non-transferable property |
10. Which of the following remedies is not available for infringement?
- |                   |                 |
|-------------------|-----------------|
| a. Civil          | b. Criminal     |
| c. Administrative | d. Personal law |
11. What is the main purpose of IPRs?
- |                            |                     |
|----------------------------|---------------------|
| a. Encourage new creations | b. More marketing   |
| c. More investments        | d. All of the above |
12. Designs does not include.....
- |                                      |                                   |
|--------------------------------------|-----------------------------------|
| a. Features of shape                 | b. Composition of lines and color |
| c. Mode of principle of construction | d. Principle of colors            |
13. Which organization oversees the implementation of the TRIP's agreement?
- |  |  |
|--|--|
| a. United Nation (UN)                      | b. World Trade organization (WTO)                  |
| c. International Labour Organization (ILO) | d. World Intellectual Property Organization (WIPO) |
14. The full form SARCOP:
- |  |   |
|--|---|
| a. Smart Review Committee for Operating Plants   | b. Safety Review Committee for Operating Plants |
| c. Safety Review Committee for Processing Plants | d. None of these                                |
15. Which of the following options is correct?  
Assertion: Patents protect inventions.  
Reason: Intellectual property rights are descriptive of the character of the things that it protects.
- |  |  |
|--|--|
| a. A is true but R is false  | b. A is false but R is true                                    |
| c. Both A and R are true and R is not the correct explanation of A | d. Both A and R are true and R is the correct explanation of A |
16. Budapest Treaty provides for deposit of microorganisms with.....
- |                          |   |
|--------------------------|---|
| a. Controller of Patents | b. State Government                         |
| c. Contracting states    | d. International Depository Authority (IDA) |
17. Biohazard waste containers should be opened:
- |   |  |
|---|--|
| a. At all times                             | b. Only when actively adding waste to them |
| c. When they are placed outside for storage | d. None of the above                       |
18. Full Form of PPE is:
- |                                  |                                     |
|----------------------------------|-------------------------------------|
| a. Personal Protective Equipment | b. Possible Protective Equipment    |
| c. Protective Physical Equipment | d. Personal Protection Enhancements |
19. The full form of AERB is:
- |                                     |                                |
|-------------------------------------|--------------------------------|
| a. Atomic Emission Regulatory Board | b. All Energy Regulatory Board |
| c. Atomic Energy Regulatory Board   | d. None of these               |

20. 'Bt' as in Bt Cotton, stands for:

- a. Genetically modified crops
- b. Bacterium Bacillus Theogin
- c. Bacterium Bacillus Thuringiensis
- d. Bacteria Bacilli Thuringien

**( Descriptive )**

Time : 2 hr. 30 mins.

Marks : 50

[ Answer question no.1 & any four (4) from the rest ]

- |  |          |
|--|----------|
| 1. Explain in brief the different forms of 'intellectual property rights' for the protection of Industrial properties. Write in detail about one of the international organizations (related to IP) of which India is a part.                                    | 5+5=10   |
| 2. What is meant by Biosafety? Write a note on the Biosafety levels.   | 5+5=10   |
| 3. What are Genetically modified organisms? Write a note on their advantages and challenges.   | 3+7=10   |
| 4. Write in brief about two treaties administered by WIPO. Explain the different rounds of negotiations that took place under WTO.   | 5+5=10   |
| 5. What is the Atomic Energy Regulatory Board (AERB)? What are the functions of AERB?  | 5+5=10   |
| 6. Write about/draw a flow chart on the patenting authorities of the Indian Patent Office (IPO) in a hierarchical manner. What is the role of the controller and the patent Examiner? Write in brief about the different steps in the patent granting procedure. | 3+2+5=10 |
| 7. What is the Cartagena Protocol on Biosafety? Explain its objectives and main features.  | 5+5=10   |
| 8. What do you mean by a 'license' given by a patentee and what are the different types of licenses? Write in brief about 'the infringement of trademarks and the remedies/reliefs available for such infringement.  | 1+5+4=10 |

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