



WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 6th Semester Examination, 2021

MCBADSE05T-MICROBIOLOGY (DSE3/4)

BIOSAFETY AND INTELLECTUAL PROPERTY RIGHTS

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.*

1. Answer any **four** questions from the following: 2×4 = 8
- (a) What is the difference between copyright and patent?
 - (b) Define 'Trade Secret'.
 - (c) What is an IPR?
 - (d) What do you mean by 'Geographical Indication'?
 - (e) What is transgenic technology?
 - (f) What do you mean by 'Golden Rice'?
 - (g) Define bioethics.
 - (h) What is 'RICIN'? Mention one major symptom of the disease caused by 'RICIN'.

Answer any four questions from the following 8×4 = 32

2. Write a short note on genetic engineering vs. traditional breeding. Give a brief account of biosafety and risk assessment. 4+4
3. What is Biosafety? What are the concerns related to Biosafety? Mention the four levels of Biosafety. 2+3+3
4. Briefly discuss why some amendments have been made in Indian Patent Act, 1970. Why all inventions cannot be patented? (Explain with suitable example/s). 4+4
5. What is Bioethics? Discuss the various ethical issues surrounding gene therapy. What is Xenotransplantation? 2+5+1

6. What do you mean by a patent? What are the criteria for patentability? Discuss the rationality behind the patent right. 2+3+3
7. Write a short report on Good Laboratory Practices (GLP). Explain with suitable example/s in the context of patenting biological agents. 4+4
8. Decode the abbreviations: 1×8
- | | | | |
|---------|-----------|----------|----------|
| (a) WTO | (b) TRIPS | (c) GATT | (d) WIPO |
| (e) PCT | (f) ITO | (g) GI | (h) IPR |
9. What do you mean by Bioweapons? Describe the uses of Biotechnology for warfare. Name two Bioweapons. 2+5+1

N.B. : *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

—x—