U.G. 6th Semester Examination - 2021 MICROBIOLOGY

Course Code: BMCBDSHT6

Course Title: Biosafety and Intellectual Property Rights

Full Marks: 40 Time: 2 Hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

- 1. Choose the correct alternative of the following (any ten): $1 \times 10=10$
 - a) WIPO is headquartered at
 - i) New York, USA
 - ii) Vienna, Austria
 - iii) Geneva, Switzerland
 - iv) Paris, France
 - b) The works protected by copyright include
 - i) Architectural works
 - ii) Literary works
 - iii) Musical works
 - iv) All of the above

- c) The term Intellectual Property Rights covers
 - i) Copyrights
 - ii) Know-how
 - iii) Trade dress
 - iv) All of the above
- d) Class II BSC provide
 - i) Personnel protection and sample protection
 - ii) Environmental protection
 - iii) Both (i) and (ii)
 - iv) Personnel protection and environmental protection
- e) Which of the following practices are not allowed in laboratory?
 - i) Eating and drinking
 - ii) Applying cosmetics
 - iii) Handling contact lenses
 - iv) All of the above
- f) The first transgenic crop of India is
 - i) Bt brinjal
 - ii) Bt tobacco
 - iii) Bt soyabean
 - iv) Bt cotton

- g) In India, term of copyright for an author lasts for
 i) The life of the author
 ii) The life of the author plus 60 years
 iii) 70 years
 - iv) 95 years
- h) The following can be patented
 - i) Machine
 - ii) Process
 - iii) Composition of matter
 - iv) All of the above
- i) The patent granted for biological entities and products derived from them are called
 - i) Ethics
 - ii) Biosafety
 - iii) Patents
 - iv) Biopatents
- j) The Paris Convention for the protection of industrial property was adopted in the year
 - i) 1783
 - ii) 1883
 - iii) 1885
 - iv) 1993

- k) Patenting genetic resources may leads to
 - i) Conservation of biodiversity
 - ii) Destruction of biodiversity
 - iii) Protection of biodiversity
 - iv) All of the above
- 1) Biopiracy means
 - i) Illegal use of genetic material
 - ii) Use of biopatents
 - iii) Exploitation of indigenous knowledge without permission and compensation
 - iv) Illegal transfer of knowledge
- m) Name the first transgenic virus resistant plant.
 - i) Rice
 - ii) Tomato
 - iii) Tobacco
 - iv) Cotton
- n) What is the reason for cultivation of GM crops by farmers?
 - i) Increased crop yield
 - ii) Low pesticide input costs
 - iii) Save management time
 - iv) All of the above

[Turn over]

- o) Where is GI registry located in India?
 i) Delhi
 ii) Chennai
 iii) Kolkata
 iv) Mumbai
- 2. Answer any **five** of the following questions:

 $2 \times 5 = 10$

- a) What is the objective of Cartagena protocol on biosafety?
- b) What is primary containment?
- c) Define IPR.
- d) What are applications of transgenic bacteria?
- e) What is the difference between GI and Trademark?
- f) Give two examples of trade secret.
- g) What is a domain name?
- h) Why is good laboratory practice important?
- 3. Answer any **two** of the following questions:

 $5 \times 2 = 10$

a) What are the benefits and risks associated with GM crops? 3+2

- b) Write the characteristics and application of BSC III. 3+2
- c) What is patent? What are the different types of patents? 1+4
- 4. Answer any **one** of the following questions:

 $10 \times 1 = 10$

- a) Describe four different types of biosafety levels along with the risks group of organisms associated with each level. Explain risk assessment.
- b) Describe Copyright and the works protected under Copyright Act. Briefly explain the procedure for obtaining copyright. What is copyright infringement? 4+5+1
- c) Write short notes on any **two**: 5+5
 - i) Geographical Indications
 - ii) Ethical concerns associated with Recombinant DNA Technology
 - iii) Indian Patent Act, 1970
