

Exam.Code:0043

Sub. Code: 18011

2125

B.Sc. (Hons.) Bio-Informatics

Fifth Semester

BIN 5003 Biosafety and IPR

Time allowed: 3 Hours

Max. Marks: 60

*NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.*

*x-x-x*

I. Answer the following:-

- a) Define biosafety.
- b) What is the significance of risk assessment in biosafety?
- c) What is the function of the Biosafety Clearing House?
- d) Differentiate between GMO and LMO.
- e) Mention two major international agreements related to biosafety.
- f) Define intellectual property.
- g) What is TRIPS and what does it regulate?
- h) What is meant by Patent Cooperation Treaty? (8x1½)

**UNIT - I**

- II. a) Explain the need for biosafety regulations in biological research.  
b) How risk assessment and risk management are applied for laboratory safety. (6,6)
- III. a) Describe the main provisions of the Cartagena Protocol on Biosafety.  
b) How the WTO framework interacts with biosafety laws at the national level. (6,6)
- IV. Discuss the guidelines for safe handling, transport, and packaging of GMOs. How do these measures prevent unintentional trans-boundary movement? (12)

P.T.O.

(2)

**UNIT - II**

- V. a) Define Intellectual Property Rights (IPR). Discuss the need, relevance, and challenges of IPR protection.  
b) Write short note on Convention on Biological Diversity. (7,5)
- VI. a) Differentiate between patents, trademarks and copyrights with suitable examples.  
b) Explain how Geographical Indications protect regional innovations. (8,4)
- VII. a) Describe the procedure for grant of patents under the Patent Cooperation Treaty.  
b) Discuss the role of patent databases in promoting innovation and technology transfer. (8,4)

x-x-x