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Total Number of Pages : 01

M.TECH

AR-19

M.TECH 1ST SEMESTER EXAMINATIONS NOV/DEC 2019

BIOTECHNOLOGY, MPCBT1030

IPR AND COMMERCIALIZATION OF BIOTECHNOLOGY

Time: 3 Hours

Max Marks : 70

The figures in the right hand margin indicate marks.

PART-A

(10 X 2=20 MARKS)

1. Answer the following questions.

- a) Comment the role of science & technology on society?
- b) What are the challenges of biotechnology research?
- c) What is Biosecurity?
- d) What is IPR? Name the IPRs?
- e) State the patentability requirements?
- f) What is Cartagena Protocol?
- g) What do you mean by HACCP?
- h) What is bioterrorism?
- i) Define ELSI?
- j) What is biological weapon?

PART-B

(5 X 10=50 MARKS)

Answer any five questions from the following.

2. Describe the principles of Bioethics and their importance in biotechnological research?
3. What are genetically modified crops? What scientific and ethical issues are associated with GM crops? How can such issues be resolved?
4. What are biological weapons? Write in detail about their social and ethical implications?
5. Write short notes on
 - a) Good Laboratory Practices (GLP).
 - b) Role of patents in biotechnological development?
6. Why biosafety is an important issue in transgenic research? Explain various biosafety guidelines at national level for research involving DNA molecules
7. Write short notes on
 - a) Biosafety assessment committee in India?
 - b) Principle of Respect for Autonomy
8. What are the safety points need to be consider in biotechnology point of view related to environmental release of GMOS