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H126

B. Tech. EXAMINATION, 2020

(Eighth Semester)

(B. Scheme) (Main & Re-appear)

BIOETHICS AND INTELLECTUAL PROPERTY RIGHTS

BT458B

(BT)

Time: 3 Hours [Maximum Marks: 75]

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note: Attempt Five questions in all, selecting at least one question from each Unit.

Unit I

- Discuss the major developments and new technology for the recombinant animals or live forms. Give specific examples.
- 2. Discuss the issues that emerge due to biomedical research. What are different law that governs the outcome of development and commercialization of the research? 15

Unit II

- **3.** Describe the following :
 - (a) rDNA-technology limitations
 - (b) Degradiation of environmental pollutants

- (c) B+cotton: its environmental impacts
- (d) Phytoremediation vs. Microbial remediation
- (e) Bacillus thuringion's as GMO.

 $3 \times 5 = 15$

4. What is Bioremediation? Explain in detail the relevance of microbial biotechnology for the environmental clean up through *in-situ* and *ex-situ* mode.

Unit III

- 5. Describe in detail about the guidelines that deals with the experimental protocol approval and use in biotechnology research.

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- 6. What is GMP? Discuss their scope and importance w.r.t. *r*-DNA based product or process. Give specific examples to support the answer.

Unit IV

- 7. What is Patent? Discuss in detail about the implications of patenting in biotechnology. Give suitable examples.

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- **8.** Discuss the following:

 $5 \times 3 = 15$

- (a) GATT and TRIPS
- (b) Farmers vs. Breeder's rights
- (c) IPR and IPP.