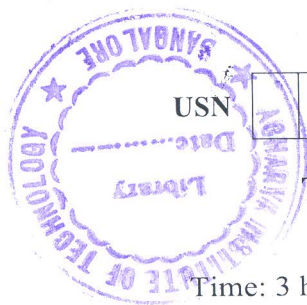


CBCS SCHEME



18BBC31/18BBT31

Third Semester M.Tech. Degree Examination, Jan./Feb.2021 Biosafety & Bioethics

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. "Traditional knowledge plays an important role in conservation of biodiversity". Justify. (10 Marks)
b. Explain the various challenges that the biotechnology sector facing in India. (10 Marks)

OR

- 2 a. With relevant examples, bring about an analysis of what challenges India faces with respect to the drug discovery domain. (10 Marks)
b. Give an account of the various laws related to ownership and use of biotechnology in India. (10 Marks)

Module-2

- 3 a. What do you understand by Bioethics? Explain its relevance and applications in Biotechnology. (10 Marks)
b. What are the ethical implications of biotechnology? Explain with examples. (10 Marks)

OR

- 4 a. What is the role of bioethics in biomedical research? Explain with a suitable case study. (10 Marks)
b. Give an account of the ethical issues related to xenotransplantation. (10 Marks)

Module-3

- 5 a. Compare and contrast GATT and TRIPS in biotechnology sector. (10 Marks)
b. With respect to Biotech products justify the role of Biosafety management. (10 Marks)

OR

- 6 a. Give an account of cartagena protocol in biosafety. (10 Marks)
b. What do you understand by containment levels? How is it applied in the BT sector. (10 Marks)

Module-4

- 7 a. Give an account of the issues related to the use of GMOs in food. (10 Marks)
b. Compare the risks involved in human and animal cloning. (10 Marks)

OR

- 8 a. Enumerate and explain the NIH guidelines for research in transgenic animals. (10 Marks)
b. Give an account of the National and International guidelines for rDNA technology. (10 Marks)

Module-5

- 9 a. Compare the risks and benefits associated with participating in clinical trials. (10 Marks)
b. Compare and highlight the importance of plant breeders right and farmers right. (10 Marks)

OR

- 10 a. Explain the various regulations that are evident for recombinant research. (10 Marks)
b. Give an account of CCAC guidelines. (10 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.