

# GUJARAT TECHNOLOGICAL UNIVERSITY

M.SC. INDUSTRIAL BIOTECHNOLOGY(IB) - SEMESTER - 2 EXAMINATION - WINTER - 2023

## **Subject Code:1320106**

Date: 11 Dec 2023

## **Subject Name: Intellectual Property Rights, Biosafety and Bioethics**

**Time:02:30 PM TO 05:00 PM**

**Total Marks: 70**

## Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Draw neat and clean diagrams as required

### Q.1 Write a note on following

**(Marks-  
10X2=20)**

1. How intellectual properties are evolutionary differ from each other?
2. Define PCT? States advantages of PCT over conventional patent applications.
3. Write major difference between the Indian Patent Act, 1970 and the Indian Patent Act, 2005 (Amendment).
4. How trademark and service mark are differs from each other? Write examples of it.
5. Indicates the purposes of plant biosafety level facilities.
6. What is genome editing? Enlist various tools used for genome editing.
7. What is the principle of “3 I” in relation to patentable innovation?
8. What is Budapest Treaty? Why there is a need to deposit the microorganisms under Budapest Treaty?
9. Define Biopiracy. Is Biopiracy is a problem?
10. Which types of inventions are not patentable in India as per The Indian Patent Act?

**Q.2 Answer the following (Any 2 out of 3)**

(Marks-  
**2X10=20**)

1. Discuss patent filling process and write advantages of complete specification over provisional specification.
2. Write principles of bioethics and discuss importance of bioethics in research.
3. Write a note on: Food Safety and Standards Authority of India (FSSAI).

**Q.3 Answer the following (Any 6 out of 8)**

(Marks-  
6X5=30)

1. Define claim. What is dependant and independent claim? Discuss with examples.
2. Mention various types of microbiological biosafety level. Compare applicability of each level.
3. Discuss: risk assessment of Transgenic Crops *vs* Cisgenic Plants.
4. Discuss various types of patent.

5. Write a note on Cartagena Protocol on Biosafety.
6. What WIPO does? Write functions of WIPO.
7. Write difference between Biosafety and Biosecurity.
8. Write about various forms for filling of complete patent application.

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