

**GUJARAT TECHNOLOGICAL UNIVERSITY****M.SC. INDUSTRIAL BIOTECHNOLOGY SEMESTER - 2 SUMMER 2022  
EXAMINATION****Subject Code:1320106****Date:12 Jul 2022****Subject Name:Intellectual Property Rights, Biosafety and Bioethics****Time:10:30 AM TO 01:00 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. Enlist different IPs.
2. What are the three criteria's of Patentability?
3. Define plant crop variety with examples.
4. Enlist various forms required during the filing of a patent application at the Indian patent office if you are a natural person
5. State points of difference between provisional and complete specification.
6. Write different types of Patent applications
7. Give full form of WTO, TRIPS, GATT, WIPO, TKDL, FSSAI
8. Define Euthanasia.
9. What is Biopiracy?
10. What are GMOs & LMOs

**Q.2 Answer the following (Any 2 out of 3)****(Marks-  
2X10=20)**

1. Explain Patent Searching in detail with the format of PSAR
2. a. Write a brief note about the Budapest treaty  
b. What are the Non-Patentable Inventions
3. Explain in detail each one of the following –  
Artificial reproductive technologies, prenatal diagnosis, genetic screening and gene therapy.

**Q.3 Answer the following (Any 6 out of 8)****(Marks-  
6X5=30)**

1. What are Biosafety levels? Explain each one in detail
2. Mention key highlights of the draft bill of the Biotechnology Regulatory authority of India
3. Explain in brief about the patents, trademarks, copyright & related rights, industrial design, traditional knowledge, geographical indications
4. Write a note on Cartagena protocol.
5. Give the flow chart of the Indian patent application filing procedure with relevant forms and fees.
6. Give the flow chart of International framework for the protection of IP
7. What is NBA? Explain in detail.
8. Give the significance of IPR in Biotechnology

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