

**Total No. of Pages : 02**

**Total No. of Questions : 09**

**B.Tech.(BT) (2011 Onwards) (Sem.-4)**  
**INTELLECTUAL PROPRIETARY RIGHTS BIOETHICS**  
**AND BIOSAFETY**  
**Subject Code : BTBT-405**  
**Paper ID : [A1170]**

**Time : 3 Hrs.**

**Max. Marks : 60**

**INSTRUCTION TO CANDIDATES :**

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

## SECTION-A

**1. Answer briefly :**

- What do you understand by intellectual property?
- What is novelty?
- What is an invention?
- What do you understand by GMO's and LMO's?
- Define bioethics.
- What is GLP and its importance?
- What is the term of a patent?
- What are various hazardous biological agents?
- What are the rights of a patentee?
- What is Cartagena protocol on biosafety?

### SECTION-B

2. Define patent and what are its prime features. How patentability is ascertained?
3. What is the role of bioethics in biology and medical field? What are unethical activities in biological work? Explain.
4. What are different biosafety levels? What criteria are used for assigning the levels of biosafety?
5. What is Patent Cooperation Treaty and what are its advantages?
6. What do you mean by provisional and complete specification that is required for filing a patent?

### SECTION-C

7. Name different points that made the origin of biosafety. Why biosafety is essential in the biotechnological development?
8. What is biowar and bioterrorism? Explain their social and ethical implications.
9. Discuss the case of patent granted on turmeric or basmati by USA. Why it was revoked and under what circumstances?