Paper Code: BT-32C	**Roll No.**									

M.Tech
THIRD SEMESTER EXAMINATION 2016-17
IPR, BIOETHICS AND BIOSAFETY

[Time: 3 hrs.] [Max. Marks: 100]

Note: Attempt ***ALL*** questions. Assume suitable data, if required. All question carry equal marks.

1. Attempt any *four* parts of the following: - **(5x4=20)**

(a) Write salient features of Cartagena protocol on biosafety.
(b) Discuss risk associated with genetically modified organisms.
(c) Define principles of biomedical ethics.
(d) What are the major issues covered in bioethics?
(e) Define physical and biological containment.

2. Attempt any *four* parts of the following: - **(5x4=20)**

(a) How are the geographical indications protected in India?
(b) Define the risk assessment for e-waste management and specify the steps involved in it.
(c) Discuss the scientific and ethical issues associated with GM crops?
(d) What does Hague agreement on industrial designs signify?
(e) Elucidate the qualification required for registration as patent agents? briefly discuss the roles of a patent agent.

3. Attempt any *two* parts of the following: - **(10x2=20)**

(a) What is the Budapest Treaty and how it facilitate Biotech patenting.
(b) Describe the lab facility and design of laboratories under different biosafety levels.
(c) Bring out the non patentable inventions as laid down in the Indian Patent Act, 1970

4. Attempt any *two* parts of the following: - **(10x2=20)**

(a) What is the Patent Cooperation Treaty (PCT)? Explain the procedure included in PCT
(b) Explain detailed fundamental principle on which containment is based and discuss its types.
(c) What is the difference between trademarks, patents and copyrights?

5. Attempt any *two* parts of the following: - **(10x2=20)**

(a) Explain the need for intellectual property laws in a developing country like India.
(b) Why Madrid agreement was required? Explain its protocol with main features?
(c) Recombinant DNA technology and human cloning are still facing some ethical issues. discuss in detail