

B.Sc. (Part - III) EXAMINATION - 2010
 (Faculty of Science)
 (Common to Three and Five Year Integrated Course)
BIOTECHNOLOGY
 (Paper - BT - 803)
 (Bioethics and IPR)

Time Allowed: Three Hours

Maximum Marks: 50

Note : Answer of all questions (short answer as well as descriptive) are to be given in the main answer-book only. Answers of short answer type questions must be given in sequential order. Similarly all the parts of one question of descriptive part should be answered at one place in the answer-book. One complete question should not be answered at different places in the answer-book. Write your roll number on question paper before start writing answers of question.

Question No. 1 is compulsory. Answer five questions in all, selecting at least one question from each Section.

PART - A

1. Answer in short :

10x1 = 10

- What are plant breeder's rights?
- What is the role of assessment of risk related to rDNA technology mean?
- What is the main difference between copyright and patents?
- What is the duration of any patent if granted in India?
- Which act governs the patent system in India?
- Define bio safety.
- What are the main ethical concerns regarding rDNA technology?
- Comment on the Cartagena Protocol 2006.
- Write two benefits of GM products.
- Express your original views about GM technology. Do you favour it or NOT?

PART - B

SECTION - A

Discuss various environmental concerns of people regarding the use of genetically modified plants. 10

OR

Discuss the following :

5+5

- Bio hazards
- Need for regulating rDNA technology.

SECTION - B

3. What precautions are used before introduction of genetically modified microorganisms and how are they monitored?

OR

What are Biological Weapons? Give some examples.

SECTION - C

4. Discuss the various types of intellectual properties related to developments in biotechnology.

OR

Discuss the advantages and disadvantages of intellectual property rights.

SECTION - D

5. Justify your answer for the following queries :
- (a) Is an artificially synthesized gene patentable?
 - (b) Are life forms (microorganisms, plants and animals) patentable?

OR

Comment on the following :

- (a) Biopiracy
- (b) General Agreement on Tariffs and Trade (GATT).