



Name :

Roll No. :

Invigilator's Signature :

CS/B.Tech (BT)/SEM-8/BT-801/2011

2011

ETHICS AND IPR IN BIOTECHNOLOGY

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

GROUP – A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for any *ten* of the following : 10 × 1 = 10

- i) Intellectual property is
 - a) physical
 - b) metaphysical
 - c) chemical
 - d) none of these.
- ii) Research involving human beings requires
 - a) informed consent
 - b) consent
 - c) undertaking
 - d) signature and consent.
- iii) Protection of a patent is the responsibility of the
 - a) Patent & Trade office
 - b) Patent Lawyer
 - c) Patent holder
 - d) Government.
- iv) WTO stands for
 - a) World Fastest Trading Opportunity
 - b) World Fair Trade Opportunity
 - c) World Fair Trade Organization
 - d) World Fastest Trading Organization.



- v) Golden rice is
 - a) invented in India
 - b) aimed to protect India from food deprivation
 - c) patented
 - d) none of these.
- vi) Berne Convention is
 - a) for the protection of literary and artistic works
 - b) for the protection of developing countries from the hazards produced in Annex I countries
 - c) for the prevention of organized piracy
 - d) for the protection of nature from anthropogenic hazards.
- vii) GATT was implemented in India in the year
 - a) 2001
 - b) 2002
 - c) 2003
 - d) 2004.
- viii) A patent in India is valid for
 - a) 10 years
 - b) 15 years
 - c) 20 years
 - d) 25 years.
- ix) Declaration of Helsinki was formulated by
 - a) WW II allied forces
 - b) World Medical Association
 - c) WTO
 - d) World Women's Association.
- x) To bring their national laws in accordance with TRIPS, developing countries were given a 'transition' period of
 - a) 14 years
 - b) 10 years
 - c) 7 years
 - d) 20 years.
- xi) Which country has not joined the WTO till 2008 ?
 - a) India
 - b) Yugoslavia
 - c) France
 - d) Bangladesh.



- b) Somebody characterised a new bacteria that can degrade various polyaromatic hydrocarbons. They are interested to protect their invention. What would be your suggestion to these people as a biotechnologist? Please justify your answer in detail. 5
- c) How will you justify/deny 'doctors assisted suicide' for the terminally ill patient? What would be the ethical principle for this biomedical event? 5
8. Write short notes on any *three* of the following : 3 × 5
- a) Declaration of Helsinki
 - b) Bio-piracy
 - c) Budapest treaty
 - d) The Nurenberg code.
9. a) What are the controversies and drawbacks in the study of eugenic research by gene therapy? 8
- b) How many categories of IPR are recognized in the TRIPS agreement? Briefly discuss each one of them. 7
10. a) Define the term "most favoured nation (MFN)". 5
- b) "The WTO was born out of negotiation". Explain. 5
- c) Explain the legal implication of germ line gene therapy. 5
11. Describe the different biosafety level. Discuss Kyoto and Castagna protocol for the protection of nature. 7 + 4 + 4
12. a) What is eugenic genetic engineering? 5
- b) What is breeders right? 5
- c) What are the obligations and benefits on modern reproductive technology? 5