



Name : .....

Roll No. : .....

Invigilator's Signature : .....

**CS/B.Sc. (H), Genetics/SEM-6/GLE-604/2011**

**2011**

**GENETIC TECHNOLOGY – SOCIAL, LEGAL AND  
ETHICAL ISSUES**

*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) The full form of GATT is
- a) Generalized Analysis of Trade and Travel
  - b) General Agreement on Tariffs and Trade
  - c) General Applications of Travel and Tourism laws
  - d) Geographical Analysis of Tour and Trade.

CS/B.Sc. (H), Genetics/SEM-6/GLE-604/2011



- ii) Computer programs are protected by copyrights under
  - a) TRIPS
  - b) Paris Convention
  - c) Berne Convention
  - d) None of these.
  
- iii) EPC stands for
  - a) European Patent Convention
  - b) Elementary Patent Conservation
  - c) European Patent Council
  - d) Essential Protocol Council
  
- iv) Intellectual property rights may be protected by
  - a) Patents and copyrights
  - b) Trade marks and service marks
  - c) Publications and exposition
  - d) Both (a) and (b).



v) Any trade mark, trade secret or copyright held by the entrepreneur is known as

- a) Disclosure document
- b) Patent
- c) Intellectual property
- d) None of these.

vi) In relation to patents, where an employee creates an invention during the normal course of employment and it relates to his/her duties at work, the intellectual property belongs to which of the following ?

- a) The employee
- b) It depends on the specific nature of the employment contract
- c) The board of directors ( if applicable )
- d) The employer.

CS/B.Sc. (H), Genetics/SEM-6/GLE-604/2011



vii) Which of the following is not a focus of intellectual property law ?

- a) To protect the product of a mental effort
- b) To prevent people from copying others' ideas
- c) To encourage the free flow of new ideas
- d) To give the creator the right to benefit from it.

viii) Which of the following cannot be protected by copyright ?

- a) Literary work
- b) Musical compositions
- c) Folklore
- d) Graphic works.

ix) The criteria for patenting is/are

- a) of practical benefit
- b) capable of being industrially reproduced
- c) must be original
- d) all of these.



- x) A.M. Chakravarty is a renowned person for first time patenting
- a) oncomouse
  - b) climbing rose
  - c) live forms
  - d) none of these.
- xi) Which of the following are requirements for copyright protection ?
- a) The works must be fixed
  - b) The works must be original
  - c) The works must be creative
  - d) All of these.
- xii) Which of the following transgenic animals first produced spider silk protein in milk ?
- a) Transgenic cow
  - b) Transgenic goat
  - c) Transgenic sheep
  - d) Transgenic mice.

CS/B.Sc. (H), Genetics/SEM-6/GLE-604/2011



**GROUP – B**

**( Short Answer Type Questions )**

Answer any *three* of the following.

$3 \times 5 = 15$

2. What is the WTO Agreement and what do its annexes cover ? 5
  
3. What are the rights conferred by a trade mark ? Give two examples of each distinctive and non-distinctive uses of the term 'trade mark'. 3 + 2
  
4. Why are the IPRs protected ? Can computer software be protected by copyright ? 4 + 1
  
5. Write two applications of transgenic pigs. 5
  
6. Write a short note on DNA microinjection. 5



**GROUP – C**

**( Long Answer Type Questions )**

Answer any *three* of the following.  $3 \times 15 = 45$

7. Define patents. Discuss various requirements and the process of award of a patent. 5 + 5 + 5
8. What are the broad issues of WTO's TRIP agreements ? Write in brief about the various forms of protection of intellectual property and discuss the advantages offered by trade secret. 5 + 8 + 2
9. Discuss a case in detail involving the patentability of live forms. 15
10. Write short notes on any *three* of the following : 3 × 5
- a) Copyrights
  - b) Diamond vs Chakravarty case
  - c) Patenting r-DNA
  - d) DNA fingerprinting
  - e) Trade marks
  - f) Requirements of a patent.

CS/B.Sc. (H), Genetics/SEM-6/GLE-604/2011



11. What is xenotransplantation ? Discuss why non-human primates are not preferred as donors for xenotransplantation.

Discuss why pigs are preferred as xenograft donor. Discuss

the barriers of xenotransplantation.

2 + 3 + 2 + 8

---