

Name :

Roll No. :

Invigilator's Signature :

CS/B.Sc. (H) Genetics/SEM-6/GLE-604/2012

2012

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

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

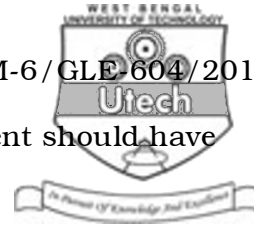
*Candidates are required to give their answers in their own words
as far as practicable.*

GROUP – A

(Multiple Choice Type Questions)

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

- i) Hyperacute rejection in xenotransplantation is mediated by
- a) Polymorphonuclear leukocytes
 - b) NK cells
 - c) Complement proteins
 - d) None of these.
- ii) Screening via pap smear is recommended for
- a) Lung cancer
 - b) Breast cancer
 - c) Cervical cancer
 - d) Prostate cancer.



- xi) To benefit from legal protection a patent should have
- a) Scientific basis
 - b) appreciation from scientific community
 - c) market potential
 - d) all of these.
- xii) Intellectual property rights may be protected by
- a) Patents and Copyrights
 - b) Trademarks and Service marks
 - c) Publications and exposition
 - d) Both (a) & (b).

GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following. $3 \times 5 = 15$

2. What is the Paris convention ? What are the principal features of the Paris convention ? 2 + 3
3. What is Budapest Treaty ? What is Patent Cooperation Treaty (PCT) ? 3 + 2
4. Why are the IPRs protected ? Can computer software be protected by copyright ? 4 + 1
5. Write short notes on any *one* of the following :
- a) Copyrights
 - b) DNA fingerprinting.
6. Write two applications of transgenic cows.



GROUP – C

(Long Answer Type Questions)

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

7. What is the WTO ? What are the objectives of WTO ? Discuss the functions of WTO. How many annexes are there in the WTO agreement and what are the contents ?
 $1 + 3 + 5 + 1 + 5$
8. What is UPOV ? What is the criteria for deciding protection of a plant varieties ? Does India have any law for protecting new plant varieties ? What is the meaning of Farmers' Variety as per PPVFR Act, 2001 ?
 $2 + 8 + 2 + 3$
9. Define patents. Discuss various requirements and the process of award of a patent.
 $4 + 8 + 3$
10. What does 'TRIPS' stands for ? Discuss in brief about patenting in rDNA technology. What is xenotransplantation ? Discuss why nonhuman primates are not preferred as donors for xenotransplantation.
 $5 + 4 + 6$
11. What is cancer screening ? What are the limitations of cancer screening ? Discuss the screening methods of any *three* common cancers.
 $1 + 2 + 4 + 4 + 4$

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