Exam. Code : 107405

Subject Code: 2232

B.Sc. Biotechnology 5th Semester PATENT LAWS IN BIOTECHNOLOGY

Paper—BT-4

Time Allowed—Three Hours] [Maximum Marks—40

Note: - Section A: ALL questions are compulsory.

 $(1 \times 8 = 8)$

Section B: Attempt any FIVE questions. Each carries 4 marks. (4×5=20)

Section C: Attempt any TWO questions. Each carries 6 marks. (6×2=12)

SECTION—A

- 1. What is a Design patent? Give at least one famous example.
- 2. What advantages the State gets by granting patent protection?
- 3. What do you understand by the term "Life of a Patent"? What happens after its expiry?
- 4. Write briefly about infringement of a patent.
- 5. Are gene sequences patentable?

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- 6. What kind of patents one can get in the field of ever expanding Biotechnology?
- 7. Are microorganisms patentable in India?
- 8. Where are the Indian Patent Offices located and which city has the Headquarter?

SECTION—B

- 9. Which are the agencies facilitating patent filing for Indian citizens? What are the possible advantages offered to the patentee? Name two such agencies.
- 10. What are the principles of TRIPS agreement and how do the farmers' rights get protected under its provisions?
- 11. What are the main elements of a patent application and how does it differ from a research article? What are the advantages offered by law to the patentee?
- 12. Out of a PATENT and a TRADE SECRET, which one should be preferred and why? Write about their respective advantages and dis-advantages. Write about one famous example of a Trade Secret.
- 13. What are Claims and their importance in redressal of legal matters? What considerations be kept in mind while framing claims in a patent specification?
- 14. What do you know about Good Lab Practices? Why meticulous record keeping is important and how does it help in legal disputes? Please explain in brief.

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- 15. What do you understand by Stem Cell research and who pioneered this field and where? What are the implications of stem cells in medical treatments?
- 16. What is your opinion about Genetically Modified Crops and whether these should be allowed to be grown in our country? What are the main concerns of those opposing GM crops and whether these are justified in view of the rising population and ensuring food security?

SECTION—C

- 17. Write briefly about the types of Intellectual Property Rights protected under law giving suitable examples in each case.
- 18. What are Plant Breeders' Rights and under which International treaty these get protection? Name three such treaties and the advantages offered to the nationals of the member countries.
- 19. Why Patent search is important both for the industry as well as individual researcher? Name at least three important cites where patent information is available. Do you agree that it helps in prevention of "RE-INVENTING WHEEL"? Give your comments.
- 20. What could be the possible risks and Bio-safety issues associated with use of genetically modified microbes? Give your view point with respect to GM crops.

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