

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATION- 2024

M.Tech-I/Ph. D. Semester (BT)

COURSE CODE (CREDITS):18M11BT114 (3)

MAX. MARKS: 25

COURSE NAME: Patenting in Biotechnology

COURSE INSTRUCTORS: Prof. Gopal S Bisht

MAX. TIME: 1 Hour 30 Minutes

*Note: (a) All questions are compulsory.*

*(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems*

Q.No	Questions	Marks
Q1.	<p>Study the case given below and answer the following questions.</p> <p>Monsanto, a leading agricultural biotech company, developed genetically modified (GM) seeds that were resistant to certain herbicides. The company patented these seeds and required farmers who purchased them to sign contracts agreeing not to save and replant seeds from their harvest. This sparked widespread controversy, as farmers traditionally saved seeds for future planting. Some farmers violated the agreement, leading Monsanto to pursue legal action.</p> <p>a) Evaluate the ethical considerations of Monsanto's seed patenting and its impact on small farmers.</p> <p>b) Analyze the implications of Monsanto's patent enforcement on traditional farming practices.</p> <p>c) Design a policy that balances Monsanto's intellectual property rights with the needs of farmers to maintain sustainable agricultural practices.</p>	6
Q2.	<p>a) Compare and contrast passing off and trademark infringement. Do you think passing off should carry the same legal penalties as trademark infringement? Defend your stand.</p> <p>b) Design a strategy for a company to avoid accusations of trademark abandonment.</p> <p>c) Do you think trade secrets offer better protection than patents in the long term? Justify your answer</p>	3 2 2
Q3.	<p>a) If an Indian company wants to protect its invention in the US, Europe, and Japan using the PCT, how should it proceed?</p> <p>b) Differentiate geographical indication from trademark. Can a registered GI be assigned/transmitted?</p>	2 2
Q4	<p>Study the case given below and then answer following questions.</p> <p>ABC Inc., a global leader in biopharmaceuticals, holds a patent for a gene-editing technology known as CRISPR-Cas9, which they patented in 2013. This technology</p>	8



allows scientists to edit genomes with unprecedented precision, revolutionizing research in agriculture, medicine, and genetic therapy. The patent covers both the method of editing specific genes and its applications in various fields, including human therapeutics.

In 2022, XYZ Biotech, a smaller biotechnology company, developed a method for enhancing crop resistance to pests by editing specific genes in plants. ABC Inc. filed a lawsuit against XYZ, claiming that XYZ's gene-editing method infringed on their CRISPR-Cas9 patent. XYZ, however, argued that their method used a modified version of CRISPR technology with unique steps and enzymes, making it distinct from ABC's patented process.

The court had to determine whether XYZ's method constituted patent infringement and whether ABC's patent claims were valid in the rapidly evolving field of biotechnology.

- a) How could XYZ INC demonstrate that their gene-editing method does not infringe on ABC's patent?
- b) What factors would the court need to examine to determine whether xyz's technology infringes ABC's patent?
- c) Do you think XYZ Biotech can successfully defend against ABC's claims? Why or why not? Justify your decision.
- d) Design a strategy for XYZ Biotech to avoid future patent infringement issues in biotechnology.

JUIT TEST-2 EXAMINING