

Roll No.

Total No. of Pages : 2

Total No. of Questions : 12

Master of Science (Medical Microbiology) (Sem.-3)

FUNDAMENTALS OF SCIENTIFIC WRITING

Subject Code : MMB/304/21

M. Code : 92528

Date of Examination : 23-06-2025

Time : 3 Hrs.

Max. Marks : 70

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **SEVEN** questions carrying **FIVE** marks each and students have to attempt any **SIX** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

SECTION-A

l. Write short notes on :

- a) Outline the distinctions between primary, secondary, tertiary, and gray sources in scientific writing.
- b) Elucidate the significance of proper citation practices.
- c) Analyse the various styles of scientific writing.
- d) Explore the diverse forms of professional medical writing such as reviews, critical appraisals, case reports, commentaries and opinion pieces.
- e) Assess the grammar essentials crucial for medical writers and discuss the role of computer programs and websites in medical transcript writing.
- f) Examine the nuances of quoting in scientific literature, emphasizing the appropriate instances, integration methods and accuracy.
- g) Evaluate the ethical implications of plagiarism in scientific writing and propose strategies to prevent it effectively.
- h) Discuss the role of proper referencing in scientific writing and its significance in academic integrity.
- i) Outline the distinctions between primary, secondary in scientific writing.
- j) Analyse the various styles of scientific writing.

SECTION - B

2. Critically analyse the steps involved in crafting a scientific paper, including the structuring of an original manuscript and navigating the publication process in specific journals.
3. Evaluate the efficacy of different journal metrics in assessing the impact and quality of scientific publications.
4. Investigate the concept of authorship in scientific writing and the controversies surrounding ghostwriting practices.
5. Explore the historical evolution of intellectual property rights and their role in fostering innovation in scientific research.
6. Assess the significance of patents, trademarks, copyrights and related rights in protecting intellectual property.
7. Examine the implications of intellectual property rights on research and development (R&D), particularly in the context of genetically modified organisms (GMOs).
8. Discuss the challenges and opportunities associated with the protection of plant varieties under intellectual property regimes.
9. Explain the process of manuscript preparation in scientific writing, highlighting the key components of an original manuscript and the importance of adhering to journal specific formatting guidelines.

SECTION - C

10. Conduct a critical analysis of the impact of intellectual property rights on the accessibility and affordability of essential medicines in developing countries.
11. Explore the ethical dilemmas surrounding the patenting of genes and genetic sequences, considering issues of ownership, access, and public health.
12. Evaluate the effectiveness of intellectual property rights in balancing the interests of innovators and the public, with a focus on promoting innovation while ensuring equitable access to scientific knowledge and technologies.

NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.