

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -I EXAMINATION- 2025

M.Sc.-II Semester (BT/BI)

COURSE CODE (CREDITS):20MS1BT216 (2)

MAX. MARKS: 15

COURSE NAME: Research Methodology and Scientific Communication Skills

COURSE INSTRUCTORS: Dr. Gopal Singh Bisht

MAX. TIME: 1 Hour

Note: (a) All questions are compulsory.

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

Q. No	Question	Marks
Q1	<p>Study the following case and then answer the questions</p> <p>Dr. ABC, a senior researcher at a prestigious university, published groundbreaking findings on a new cancer treatment. His results showed an almost 90% success rate in reducing tumor sizes, gaining widespread attention and leading to further funding.</p> <p>However, a junior researcher in his lab noticed discrepancies in the raw data. Upon further investigation, it was discovered that Dr. ABC had fabricated a significant portion of the results. The university launched an inquiry, leading to the retraction of the paper and the termination of Dr. ABC's position.</p> <p>a) What type of research misconduct occurred in this case? Analyze which ethical principles were violated? [2]</p> <p>b) What were the consequences of the misconduct? How could this misconduct have been prevented? [2]</p> <p>c) What lessons can be learned from this case? [1]</p>	5
Q2	<p>Answer/Explain the following questions.</p> <p>a) How impact factor of a research journal is calculated? Is Impact factor a true criterion for judging quality of research paper? Justify your answer. [2]</p> <p>b) Evaluate the importance of documenting your literature search. [2]</p>	2
Q3	<p>Design a comprehensive framework for identifying and formulating a research problem. Develop and justify key criteria that researchers should consider while selecting a research problem. Create real-world examples illustrating how different research problems are formulated and refined based on these criteria." [6]</p>	6