

Name: Enrolment No:			
UPES End Semester Examination, December 2025			
Course: BSc-Physics by Research Program: Research methodology and Ethics Course Code: ASRM4001		Semester: VII Time: 3 hour Max. Marks: 100	
Instructions: Read all the questions carefully. There is internal choice in question no 9 and 11			
SECTION A (5Qx4M=20Marks)			
S. No.		Marks	CO
Q1	Discuss the significance of research approaches in scientific studies.	4	CO3
Q2	Illustrate the role of the WIPO Convention (1967).	4	CO2
Q3	Differentiate between Novelty and Non-Obviousness with examples.	4	CO1
Q4	Define fabrication in research and its consequences.	4	CO4
Q5	Explain misrepresentation of data with an example in research context.	4	CO4
SECTION B (4Qx10M= 40 Marks)			
Q6	Describe how scientific communication impacts visibility, credibility, and progress of research with case examples.	10	CO3
Q7	Elaborate on the importance of Intellectual Property Rights (IPR) in economic growth and innovation.	10	CO2
Q8	Depict different types of conflict of interest in publication.	10	CO4
Q9	Compare scientific misconduct in terms of Falsification and Fabrication with examples. Or Identify duplicate and overlapping publications with help of suitable examples.	10	CO4
SECTION-C (2Qx20M=40 Marks)			
Q10	Classify subject matters of copyright with examples.	20	CO2
Q11	Evaluate WAME's contribution to ensure integrity, transparency, and equity in scholarly publication across the globe. Or Define research integrity, its importance and highlight common violations that threaten research reliability.	20	CO4