Name:

**Enrolment No:** 



## UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

**End Semester Examination, December 2022** 

**Course: Research and Publication Ethics** 

**Semester: III** 

Program: MSc (Physics & Chemistry) Time : 03 hrs

Course Code: PHYS 8021 Max. Marks: 100

## **Instructions:**

S No

All questions of section 'A' are compulsory.

• In section 'B' Q1, Q2 and Q3 are compulsory, attempt any ONE in Q4

• In section 'C' Q1 is compulsory, attempt any ONE in Q2

## SECTION A (5Qx4M=20Marks)

	Marks	CO
Explain the criteria for patentability.	<b>4M</b>	CO2
List the attributes of a good manuscript.	4M	CO1
Give the formula for finding h-index and impact factor.	4M	CO1
Discuss the importance of good research ethics.	4M	CO3
Discuss the types of research misconducts.	4M	CO3
SECTION B		
(4Qx10M=40 Marks)		
Discuss the standards of ethics in scientific research.	10M	CO3
Explain the roles and responsibilities of various patent offices in India.	10M	CO2
Explain the components of scientific manuscript.	10M	CO1
Define Intellectual Property Rights (IPRs). Explain various types of IPRs  OR	10M	CO2
Discuss the importance of IPR for start-ups.		
SECTION-C		
(2Qx20M=40 Marks)		
a) Illustrate using a flow chart, various stages of filing to grant of a patent. (10M)	20M	CO2
	List the attributes of a good manuscript.  Give the formula for finding h-index and impact factor.  Discuss the importance of good research ethics.  Discuss the types of research misconducts.  SECTION B (4Qx10M= 40 Marks)  Discuss the standards of ethics in scientific research.  Explain the roles and responsibilities of various patent offices in India.  Explain the components of scientific manuscript.  Define Intellectual Property Rights (IPRs). Explain various types of IPRs  OR  Discuss the importance of IPR for start-ups.  SECTION-C (2Qx20M=40 Marks)  a) Illustrate using a flow chart, various stages of filing to grant of a	Explain the criteria for patentability.  List the attributes of a good manuscript.  Give the formula for finding h-index and impact factor.  Discuss the importance of good research ethics.  Discuss the types of research misconducts.  SECTION B  (4Qx10M= 40 Marks)  Discuss the standards of ethics in scientific research.  Explain the roles and responsibilities of various patent offices in India.  Explain the components of scientific manuscript.  Define Intellectual Property Rights (IPRs). Explain various types of IOM IPRs  OR  Discuss the importance of IPR for start-ups.  SECTION-C  (2Qx20M=40 Marks)  a) Illustrate using a flow chart, various stages of filing to grant of a

	b) List the states/ UT covered by various patent offices in India. (10M)		
Q 2	Discuss the exclusions of Section (3) under patent act.	20M	CO3
	OR		
	Write short notes on <i>any four</i> the following:		
	a) The Paris Convention, 1883		
	b) The Berne Convention, 1886		
	c) The Universal Copyright Convention, 1952		
	d) The WIPO Convention, 1967		
	e) The Patent Co-operation Treaty, 1970		