Name: Enrolment No:	

UPES

End Semester Examination, December 2024

Course: Research Methodology and IPR **Semester : I**

Program: MSc. Nutrition and Dietetics and Microbiology **Duration : 3 Hours**

Course Code: HSCC7020 **Max. Marks: 100**

Instructions: Attempt all questions. All questions are compulsory

S. No.	Section A Short answer questions/ MCQ/T&F (20Qx1.5M= 30 Marks)	Marks	COs
Q 1	Principles of animal research include a. Reduce b. Reuse c. Replace d. All of the above	1.5	CO1
Q 2	Conducting animal research for human good is justified. (True/False)	1.5	CO1
Q 3	Define CPSCEA?	1.5	CO1
Q 4	The Prevention of Cruelty to animals act is governing animal research in India. (True /False)	1.5	CO1
Q 5	The duration of protection of patent is 60 years. Is it true or false?	1.5	CO2
Q 6	Patent incentivizes innovation. (True/False)	1.5	CO2
Q 7	Define IPR.	1.5	CO2
Q 8	Select the correct option describing a form of plagiarism? a. Properly citing all sources b. Rewording ideas from another work without attribution c. Including an original idea in a research paper d. Publishing unique research finding	1.5	CO2
Q 9	Choose the primary purpose of obtaining informed consent from research participants? a. To ensure that the study is funded b. To allow researchers to publish without restriction c. To protect participants' autonomy and rights d. To increase the study's sample size	1.5	CO3
Q 10	Select the option from the following best describes "gift authorship"? a. Giving authorship to individuals who provided significant contributions to the research b. Offering authorship to individuals to acknowledge their hard work on the project	1.5	CO3

	c. Listing individuals as authors even if they did not contribute significantly to the work **d. Excluding individuals who contributed to the work from the list of authors**		
Q 11	**Discuss one advantage that copyright gives to an artist .**	**1.5**	CO3
Q 12	**Write about any two examples of patented technology.**	**1.5**	CO3
Q 13	**Illustrate different types of IPRs with suitable diagram.**	**1.5**	CO4
Q 14	**Give two examples of Copyrighted materials.**	**1.5**	CO4
Q 15	**Select the option protecting the intellectual property created by designers?** **a. Copyright** **b. Geographical indications** **c. Patents** **d. Registered designs**	**1.5**	CO4
Q 16	**Plagiarism is acceptable in research publications. (True/False)**	**1.5**	CO4
Q 17	**If you file provisional specification, the complete specification is required to be filed within** **a. 10 months** **b. 12 months** **c. 18 months** **d. 24 months**	**1.5**	CO5
Q 18	**Publication of the patent application is done automatically after** **a. 10 months** **b. 12 months** **c. 18 months** **d. 24 months**	**1.5**	CO5
Q 19	**Choose from the following IPR protecting technical invention?** **a. Geographical Indication** **b. Trademark** **c. Patent** **d. Copyright**	**1.5**	CO5
Q 20	**Select correct option an example of an ethical violation in human research?** **a. Providing participants with adequate information about the research** **b. Keeping participant data confidential** **c. Conducting research without informed consent** **d. Allowing participants to withdraw at any time without penalty**	**1.5**	CO5
Section B **(4Qx5M=20 Marks)**			

Q 1	**Discuss the patent exclusions in detail.**	**5**	CO 1
Q 2	**Define Prior Art? Describe its importance in drafting the patent.**	**5**	CO 1
Q 3	**Write a note on COPE.**	**5**	CO 2
Q 4	**Write a note on different types of Publication Databases.**	**5**	CO 3
	Section C **(2Qx15M=30 Marks)**		
Q 1	**Discuss following with suitable examples** **a. Publication Ethics** **b. Geographical Indication** **c. COPE**	**3x5=15**	CO 4
Q 2	**Enlist and Discuss types of IPRs available in India giving important features, time of protection and examples of IPs protected under each type. Discuss one case study of Kani Tribe in details.**	**10+5=15**	CO 5
	Section D **(2Qx10M=20 Marks)**		
Q 1	**A Microbiologist discovered a novel enzyme from microorganism from a biodiversity protected area. The gene was isolated from the microorganism and modified to get an enhanced enzyme able to work at higher temperature and in the presence of organic solvents. Based on information presented above answer the following questions.** **1. Can a patent be granted on the microorganism? Give proper justification for your answer.** **2. Before going to biodiversity protected area the microbiologist needed the permission for state biodiversity board. (True/False) Justify your answer,** **3. If microbiologist wants to get a patent, can he get patent on enhanced enzyme? (True/False). Justify your answer with proper argument.**	**3+3+4=10**	CO 2
Q 2	**Discuss in detail about patent application and approval process.**	**10**	CO 3