

Name:	
Enrolment No:	

UPES End Semester Examination, May 2024	
Course: Animal Studies and Toxicity Assessment Program: Int. (B.Sc.+ M.Sc. (CR)) Course Code: HSCR2003	Semester: IV Time: 03 hrs. Max. Marks: 100
Instructions: Read the question paper carefully. Attempt the questions as mentioned.	

S. No.	Section A Short answer questions/ MCQ/T&F (20Qx1.5M= 30 Marks)	Marks	COs
Q 1	Define <i>in-vitro</i> study.	1.5	CO1
Q 2	Give two examples of cancer cells.	1.5	CO2
Q 3	Write one application of <i>in-silico</i> study.	1.5	CO2
Q 4	Enlist special toxicity in preclinical research.	1.5	CO2
Q 5	Define drug potency.	1.5	CO1
Q 6	Elaborate the term LD ₅₀ .	1.5	CO1
Q 7	Define therapeutic index.	1.5	CO1
Q 8	Abbreviate the terms – GHS and OECD with respect to toxicity study.	1.5	CO1
Q 9	How long chronic toxicity study is performed?	1.5	CO2
Q 10	Give example of two antibiotics.	1.5	CO2
Q 11	State the action of antibiotics on bacteria.	1.5	CO2
Q 12	Write two species of mice used in biological evaluation of drugs.	1.5	CO2
Q 13	Enlist the types of bioassays.	1.5	CO2
Q 14	Predict the effect of pyrogens on human body.	1.5	CO1
Q 15	Define the term drug distribution.	1.5	CO1
Q 16	Write the definition of bioavailability.	1.5	CO2
Q 17	Which materials are used for packaging of liquid dosage forms?	1.5	CO1
Q 18	Define mutagenicity.	1.5	CO1
Q 19	Elaborate the term carcinogens in one sentence.	1.5	CO2
Q 20	How does bioavailability differ from bioequivalence?	1.5	CO2
Section B (4Qx5M=20 Marks)			
Q 1	Define Bioassay and write about its applications.	5	CO2
Q 2	Differentiate endogenous and exogenous pyrogens with suitable examples.	5	CO3
Q 3	Discuss various requirements of cell culture study.	5	CO2

Q 4	Explain the term preclinical evaluation.	5	CO3
Section C (2Qx15M=30 Marks)			
Q 1	Discuss novel drug delivery systems. Explain their advantages, limitations, and applications.	5 + 10	CO3
Q 2	How to perform biological activity of any drug? Explain with respect to <i>in-vivo</i> as well as <i>in-vitro</i> experimentations.	5 + 10	CO5
Section D (2Qx10M=20 Marks)			
Q 1	Discuss all the parameters of pharmacokinetics study.	10	CO5
Q 2	Write about requirements of microbiological assay.	10	CO3