

Name:	 UPES UNIVERSITY WITH A PURPOSE
Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

Online End Semester Examination, January 2021

Course: Pharmacology and Toxicology I

Semester: 1st

Program: M.Sc. Clinical Research

Time 03 hrs.

Course Code: HSCC7010

Max. Marks: 100

Instructions:

SECTION A

1. Each Question will carry 5 Marks

2. Instruction: Complete the statement / Select the correct answer(s)

S. No.	Statement of question (Attempt all questions)	30	CO
Q 1	Characteristics of drugs that cross the blood-brain barrier (BBB) are a)b).....c)d)and e).....	5	CO1
Q 2	Mark the following statements True (T) or False (F) The autonomic nervous system: a) Contains preganglionic neurons. b) Has a sympathetic subdivision. c) Innervates skeletal muscles. d) Has a parasympathetic subdivision. e) Contains postganglionic neurons	5	CO3
Q 3	Factors affecting solubility of a drug are: a)b).....c)d)and e).....	5	CO2
Q 4	Mark the following statements True (T) or False (F) The substances that block neuromuscular transmission include: a) Botulinum toxin.	5	CO4

	b) Curare. c) Epinephrine . d) Neostigmine . e) Neomycun .		
Q 5	Toxicants are eliminated from the body by several routes include a)b).....c)d)and e).....	5	CO2
Q 6	Mark the following statements True (T) or False (F) EC50 mainly reflexes a drug's: a) maximal effect b) potency c) lethality d) ease of elimination e) safety	5	CO1

SECTION B

1. Each question will carry 10 marks. Answer all 5 questions.

2. Instruction: Write short / brief notes

	Statement of question	50	CO
Q 1	(a) Why is a Therapeutic Relationship Important? (b) What are the principles of pharmacology?	10	CO1
Q 2	(a) Discuss the different phases and applications of Toxicokinetic (TK) studies? (b) How does it differ from the usual Pharmacokinetic studies?	10	CO2
Q 3	Write notes on: (a) Pharmacology of Muscarinic receptor antagonists. (b) Acetylcholinesterase enzyme	10	CO3

	(c) Beta-blockers. (d) Clinical applications of gene therapy. (e) Role of ATP in active transport		
Q 4	(a) Classify adrenergic drugs with examples. (b) Discuss the pharmacological actions and therapeutic uses of adrenaline in detail.	10	CO3
Q 5	Briefly discuss the following pharmacological concepts, using examples where appropriate: (a) Genetic predisposition to adverse drug reactions (b) Therapeutic index (c) Receptor down regulation (d) Metabolic activation of prodrugs.	10	CO2
SECTION C			
1. Each question will carry 20 marks.			
2. Instruction: Write Long Answer.			
	Statement of question	20	CO
Q 1	(a) What is the mechanism of action and therapeutic uses of Benzodiazepines? (b) What are the therapeutic uses and adverse effects of Valproic acid and sodium valproate? OR (a) Discuss on “The new horizons of pharmacotherapy and pharmacology”. (b) Classify receptors and discuss molecular structure of Ligand gated Ion channels.	20	CO4