### **Enrolment No:**



#### **UPES**

## **End Semester Theory Examination, May 2024**

Course: Pharmacology-I
Program: B. Pharm.
Course Code: BP 404T
Semester: IV
Time: 03 hrs.
Max. Marks: 75

#### **Instructions: Attempt all the questions**

# SECTION A (20Ox1M=20 Marks)

	(20QXIM=20 Marks)		_
S. No.		Marks	COs
Q1	Tolerance and dependence are examples of-		CO1
	a. Adverse drug reactions	1	
	b. Drug interactions		
	c. Drug addiction phenomena		
	d. Pharmacokinetics		
Q2	The dose-response relationship describes-		CO1
	a. The relationship between drug concentration and		
	therapeutic effect		
	b. The relationship between drug dose and drug toxicity	1	
	c. The relationship between drug dose and patient weight		
	d. The relationship between drug dose and drug expiration		
	date		
Q3	Drug interactions can lead to-		CO1
	a. Increased therapeutic effects	4	
	b. Decreased therapeutic effects	1	
	c. Increased side effects		
	d. All of the above		
Q4	Which of the following is a common treatment for myasthenia gravis?		CO1
	a. Acetylcholinesterase inhibitors		
	b. Beta-blockers	1	
	c. Opioids		
	d. Antihistamines		
Q5	Specific inhibitor of alcohol dehydrogenase-		CO1
	a. Disulfiram	1	
Q5		1	COI

	b. Fomepizole		
	c. Methyl alcohol		
	d. Zolpidem		
Q6	Timolol belongs to which class of drugs?		CO1
	ACE: 1314		
	<ul><li>a. ACE inhibitors</li><li>b. Calcium channel blockers</li></ul>	1	
	c. Opioids		
	d. Beta-blockers		
Q7	All of the following are CNS stimulant except-		CO1
	A 1 / '		
	a. Amphetamine	1	
	b. Cocaine		
	c. Methylphenidate		
00	d. Etomidate		GO 1
Q8	Pilocarpine is a-		CO1
	a. Muscarinic cholinergic drug		
	b. Nicotinic cholinergic drug	1	
	c. Alpha-adrenergic drug		
	d. Beta-adrenergic drug		
Q9	Maximum first pass metabolism is seen by which route-		CO2
	a. Rectal	1	
	b. Oral	1	
	c. Intravenous		
	d. Intrathecal		
Q10	The neurotransmitter serotonin is associated with-		CO2
	a. Mood regulation		
	b. Muscle contraction	1	
	c. Pain sensation		
	d. Memory formation		
Q11	In which phase of clinical trials healthy normal human volunteers		CO2
QII	participate-		CO2
	a. I		
	b. II	1	
	c. III		
	d. IV		
Q12	Local anesthetics work by-		CO2
~- <del>-</del>		1	
	a. Blocking sodium channels	1	
	b. Increasing neurotransmitter release	1	i

	c. Stimulating nerve endings		
	d. Inhibiting G-protein activation		
Q13	Which of the following is an example of a neuromuscular blocking agent?		CO2
	a. Diazepam	1	
	b. Morphine	1	
	c. Succinylcholine		
	d. Lidocaine		
Q14	For antipsychotic action, activity is required at receptor-		CO2
	a. M <sub>1</sub> muscarinic		
	b. D <sub>1</sub> dopaminergic	1	
	c. D <sub>2</sub> dopaminergic		
	d. 5HT <sub>4</sub> serotonergic		
Q15	Write on $\beta_1$ , $\beta_2$ and $\beta_3$ adrenergic receptors key distribution in body.	1	CO2
Q16	Write examples of MAO-A and MAO-B inhibitors	1	CO2
Q17	Dopamine plays a role in-		CO5
	a. Muscle relaxation		
	b. Reward and pleasure	1	
	c. Digestion		
Λ10	d. Pain sensation	1	COF
Q18 Q19	Why is acetylcholine not used as a drug? What is minimum alveolar concentration?	1	CO5
Q19 Q20	What is cheese reaction?	1	CO5
Q20	SECTION B (20 Marks)	1	CO3
	(2Qx10M=20 Marks)		
Attempt	2 Question out of 3		
Q1	A businessman aged 35 years suffered loss and his employees left. He	4+3+3	CO5,
	became very depressed and stopped taking interest in the business.		
	Gradually he stopped going out and withdrew socially. He felt guilty,		
	worthless, and tired all the time, lost interest in pleasure and sex,		
	stopped eating properly and had disturbed sleep. When he showed no		
	sign of recovery even after 3 months, the family members consulted a		
	doctor, who diagnosed him to be a case of major depression and		
	prescribed—Tab Sertraline 50 mg twice a day, and a multivitamin. The		
	family members brought him back after one week and complained that		
		1	1

	felt more restless, had nausea, pain in upper abdomen, headache and no		
	desire to eat.		
	(a) What could be the reason for no improvement in the depressive		
	symptoms?		
	(b) Is the choice of drug inappropriate? Does the medication need to be		
	changed, dose increased or decreased?		
	(c) Should another drug be added at this stage?		
Q2	What is epilepsy? Discuss the types of epilepsy. Classify antiepileptic drugs with examples.	1+3+6	CO1 CO5
Q3	What is biotransformation? Discuss the phases of biotransformation.	2+8	CO1 CO2
	SECTION-C (35 Marks)		
	(7Qx5M=35 Marks)		
Attemp	t 7 Question out of 9		
Q 1	Write a note on clinical use of beta blockers.	5	CO1
Q2	Name the neurotransmitters involved in Parkinson's disease. Classify	5	CO1,
	anti-Parkinson's drugs.		CO2
Q3	Explain the pharmacology of drugs used in Alzheimer's disease.	5	CO1
			CO2
Q4	What are extrapyramidal side effects? Name the drugs causing	3+2	CO3, CO5
	extrapyramidal side effects.		
Q5	Discuss the phases of clinical trials.	5	CO5
Q6	Write a brief note on lithium.	5	CO2
<b>Q7</b>	Write a note on pharmacology of acetylcholine.	5	CO1
Q8	Write steps involved in neurohumoral transmission.	5	CO3
Q9	Discuss treatment strategies in glaucoma.	5	CO1, CO2, CO5