Full Marks: 75





BRAINWARE UNIVERSITY

Term End Examination 2022 Programme – B.Pharm-2018/B.Pharm-2019/B.Pharm-2020 Course Name – Medicinal Chemistry II Course Code - BP501T (Semester V)

Time: 3:0 Hours [The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.] Group-A (Multiple Choice Type Question) 1 x 20=20 Choose the correct alternative from the following : (i) Which of the following agents is a glucosidase inhibitor? a) Acrabose b) Pepsin c) Dezocine d) Butorphanol (ii) Omeprazole is a a) Proton pump inhibitor b) Beta blocker c) Antineoplastic agent d) Antihistaminic (iii) Which of the following is a mast cell stabilizer? a) Nicotine b) Esmolol c) Muscarine d) Cromolyn sodium (iv) Diuretics are used to: a) increase blood flow rate b) increase urine flow rate c) increase reabsorption d) none of these (v) Which of the following is involved in inflammatory response? a) Acetylcholine b) Histamine c) Epinephrine d) Noradrenaline (vi) How many major subtypes of Histamine receptors are there? b) 3 c) 10 d) 5 (vii) The compound with tri nitrate ester of glycerol used as a Nitroglycerine compound is a) 1,2,4-butanetriol trinitrate b) 1,3,5-pentanetriol trinitrate c) 1,2,3-propanetriol trinitrate d) none of these (viii) Which of the following acts as a mediator of itching? a) Histamine b) Epinephrine c) Acetylcholine d) Norepinephrine (ix) α-napthol derivative used as an antihypertensive drug is: a) Atenolol b) Propranolol c) Metoprolol d) Timolol

(x) Which drug acts as nitric oxide donor?

a) Sotalol	b) Clofibrate	
c) Nifedipine	d) Nitroglycerine	
(xi) Which of the following i	s used for the treatment of allergy?	
a) Timolol	b) Aspirin	
c) Nimesulide	d) Cetrizine	
(xii) Insulin consists of		
LUGSSA 1	250 W	36
a) 51	b) 60	
c) 80	d) 90	
	reatment of Zollinger-Ellison syndrome is	
a) Isoproterenol	b) Famotidine	
c) Carboplatin	d) Aspirin	
(xiv) Cetrizine is a		
a) Piperazine derivative	b) Pyrazole derivative	
 c) Oxymorphone derivative 		
(xv) The compound with tri r	nitrate ester of glycerol used as a Nitroglycerine compound is	
a) 1,2,4-butanetriol trinitr	ate b) 1,3,5-pentanetriol trinitrate	
c) 1,2,3-propanetriol trini		
(xvi) Which of the following is		
a) Repaglinide	b) Nitrous oxide	
c) Desflurane	d) Propofol	
(xvii) Class IV Antiarrhythmic		
a) Ca++ channel		
	b) Na+ channel	
c) K+ channel	d) None of these	50
	d part that is common in ACE inhibitor is	201
a) Alanine	b) Serine	
c) Glycine	d) Proline	
(xix) High celling diuretics act		
a) Na+/K+/2CI-Â cotransp	SECTION OF THE PROPERTY OF THE	
c) Na+/H+antiport	d) water reabsorpton	
(xx) Which of the following is	s an ethylene diamine derivative?	
a) Pyrilamine	b) Aspirin	
c) Paracetamol	d) Celecoxib	
	Group-B	
	(Short Answer Type Questions)	5 x 7=35
	Experimental Control of the Control	
Explain the mechanism of action for menadione with its chemical structure and nomenclature		(5)
	itidine with IUPAC name and adverse as well as therapeutic	(5)
applications of Ranitidine	iddine with forac flame and adverse as well as therapeutic	(5)
	action for cortisone schematically	(E)
4. Establish the mechanism of action for cortisone schematically5. Write the structure, nomenclature and therapeutic uses of sotalol		(5)
6. Write the structure and mechanism of action methotrexate		(5) (5)
7. Explain the therapeutic uses and Physiological role played by the Glucocorticoids and		(5)
mineralocorticoids	and Tryslological fore played by the diatocol ficolds and	(3)
	loroethamine and pharmacological uses of it	(5)
,	OR .	(5)
Write the synthesis and ther	(7.0)	(5)
	Group-C	
	(Long Answer Type Questions)	10 x 2=20
9. Classify the antianginal age	nts and provide the possible structural examples	(10)
	0.0	

OR Page 2 of 3

Correlate the chemical structure and pharmacological activity relations of Estrogens with the possible structural examples.

10. Considering the chemical structure with IUPAC name, write the steps involved in the synthesis of warfarin with mechanism of its pharmacological activity

OR

Conclude the mechanism of action and detailed steps involved for the synthesis of methotrexate and mercaptopurine

(10)