

Question Paper set -2

END SEMESTER THEORY EXAMINATION 2021-22

Subject: ADVANCED PHARMACOLOGY II
Duration: 03 HOURS

Year and Sem: M. PHARM SEM II
Total marks: 80 MARKS

N.B.: 1. All questions are compulsory
2. Figures to right indicate full marks

Q. 1	Choose appropriate option for following multiple choice based questions.	20 M
1	Drug Activating peroxisome proliferator-activated receptor γ (PPAR- γ) is	
	a Glimepiride	
	b Metformin	
	c Pioglitazone	
	d Miglitol	
2	Progestin and estrogen are combined contraceptive pill because	
	a The estrogen blocks the side effects of the progestin	
	b The progestin blocks the side effects of the estrogen	
	c Both synergize to suppress ovulation	
	d Both synergize to produce hostile cervical mucus	
3	The mechanism of penicillin's antibacterial effect is:	
	a Inhibition of transpeptidation in the bacterial cell wall	
	b Inhibition of beta-lactamase in the bacterial cell	
	c Activation of endogenous proteases, that destroy bacterial cell wall	
	d Activation of endogenous phospholipases, which leads to alteration of cell membrane permeability	
4	Which of the following inhibits viral DNA synthesis	

a Interferon	
b Saquinavir	
c Amantadine	
d Acyclovir	
5 Methotrexate is:	
a A purine antagonist	
b A folic acid antagonist	
c An antibiotic	
d An alkylating agent	
6 Inhaled beclomethasone dipropionate should be used only in:	
a An acute attack of asthma	
b Moderate to severe chronic asthma	
c Status asthmaticus	
d Asthma not responding to systemic corticosteroids	
7 The Somogyi phenomenon is observed in	
a Diabetes	
b Hypertension	
c Peptic ulcer	
d Asthma	
8 The _____ form of pantoprazole is more potent	
a S- enantiomer	
b R- enantiomer	
c Racemic mixture	
d Both S- and R- enantiomer	
9 Nitric oxide synthase (NOS) responsible for immune response is	
a Endothelial NOS	
b Inducible NOS	
c Neuronal NOS	
d Epithelial NOS	

10	Newer glucagon-like peptide-1 receptor agonists	
	a Saxagliptin	
	b Sitagliptin	
	c Semaglutide	
	d Meglitinide	
11	In the treatment of hypothyroidism, thyroxine is preferred over liothyronine because thyroxine	
	a Can be made more easily by recombinant DNA technology	
	b Has a longer half-life	
	c Has a higher affinity for thyroid hormone receptors	
	d Is faster acting	
12	The mechanism of action of calcitonin is:	
	a Inhibits hydroxyapatite crystal formation, aggregation, and dissolution	
	b Raises intracellular cAMP in osteoclasts	
	c Activates bone resorption	
	d Inhibits macrophages	
13	Mechanism of Amphotericin B action is:	
	a Inhibition of mRNA formation	
	b Inhibition of fungal protein synthesis	
	c Inhibition of DNA synthesis	
	d Alteration of cell membrane permeability	
14	Combined chemotherapy of tuberculosis is used to:	
	a Decrease mycobacterium drug-resistance	
	b Increase mycobacterium drug-resistance	
	c Decrease the antimicrobial activity	
	d Decrease the onset of antimycobacterial drugs biotransformation	
15	Select the fourth-generation cephalosporin among the following:	
	a Ceftazidime	
	b Ceftizoxime	
	c Cefpirome	
	d Cefuroxime	

16	Relatively higher dose of theophylline is required to attain therapeutic plasma concentration in:	
a	Smokers	
b	Congestive heart failure patients	
c	Those receiving erythromycin	
d	Those receiving cimetidine	
17	ACE inhibitors are preferred to be administered at _____ as per chronotherapy	
a	Night	
b	Early morning	
c	Noon	
d	Afternoon	
18	Prokinetic drugs fail to be used in the treatment of _____	
a	Ulcer	
b	Emesis	
c	Vertigo	
d	Inflammatory bowel syndrome	
19	The following is an absolute contraindication to the combined oral contraceptive pills	
a	Previous history of viral hepatitis	
b	Prosthetic heart valve	
c	Diabetes mellitus	
d	Parkinsonism	
20	The immunosuppressive effect of glucocorticoids is caused by:	
a	Reducing the concentration of lymphocytes (T and B cells) and inhibiting the function of tissue macrophages and other antigen-presenting cells	
b	Suppression of cyclooxygenase II expression which results in reducing the amount of an enzyme available to produce prostaglandins	
c	Activation of phospholipase A2 and reducing prostaglandin and leukotriene synthesis.	
d	Induction of cyclooxygenase II expression results in reducing the amount of an enzyme available to produce prostaglandins.	

Q. 2 A Answer any one question

12 M

- 1 Explain chrono pharmacology. Give a detailed account of biological and circadian rhythms.
- 2 Discuss in detail the modes of action of the following: a. Catalase b. Glutathione

Q. 2 B Answer any four questions

48 M

- 1 Classify oral hypoglycaemic drugs. Discuss in detail the mechanism of action of each class.
- 2 Classify antiviral drugs with examples. Write a note on anti-influenza virus drugs.
- 3 Classify antiemetics. Discuss in detail the pharmacology of anyone class of anti-emetics.
- 4 Discuss in detail the pharmacotherapy of asthma.
- 5 Classify immunostimulants with examples. Discuss various therapeutic uses of immunostimulants