

CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

3rd Semester of B. Pharm. Examination (New)

University Theory Examination April 2016

PH215 - Pharmacology-I

Date: 11/04/2016, Monday

Time: 1.30 PM to 4.30 PM

Maximum Marks: 80

Instructions:

1. There are three sections in this question paper.
 2. SECTION – I comprises of Question 1. Total marks for Section 1 are 20. There are 20 sub-questions (MCQ type). Answers to SECTION – I are to be given in Answer Sheet for MCQ type questions provided to you. Maximum time allotted for SECTION – I is 30 minutes. Answers to SECTION – I must be written during the first 30 minutes of the examination.
 3. Answers to SECTION – II and SECTION – III are to be provided in separate Main Answer Books provided to you.
 4. Figures to right indicate marks.
 5. Draw neat sketches wherever necessary.
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SECTION - I

- Q 1** Attempt all questions. Each question is of one mark. **20**
1. Which are the targets for drug binding?
[A] Receptor
[B] Enzyme
[C] Ion channel
[D] All of above
 2. Which of the following is example of G protein coupled receptor (GPCR)?
[A] Muscarinic receptor
[B] Nicotinic receptor
[C] Cytokine receptor
[D] Oestrogen receptor
 3. The characteristic structure of GPCR is made up of
[A] eleven transmembrane alfa helices
[B] Seven transmembrane alfa helices
[C] Three transmembrane beta helices
[D] Five transmembrane beta helices
 4. One of the following is an example of anticholinesterase drug
[A] Physostigmine
[B] Loratidine
[C] Adrenaline
[D] metoprolol
 5. Which of the following is not a injectable route of drug administration?
[A] subcutaneous
[B] intravenous
[C] intrathecal
[D] sublingual
 6. One of the following drug is an example of Prodrug
[A] Gentamicin
[B] Levodopa
[C] Apirine
[D] Morphin

7. What is the toxic metabolite of cyclophosphamide?
 - [A] acrolien
 - [B] fluoride
 - [C] phosphamide
 - [D] tetracyclophosphamide
8. Which food product is avoided with use of tetracycline?
 - [A] Fish
 - [B] Soyabin
 - [C] Milk
 - [D] Eggs
9. What is the effect of combining adrenaline with local anaesthetic injection?
 - [A] absorption of anaesthetic increases
 - [B] vasoconstriction slows absorption of anaesthetics and prolongs local effect
 - [C] vasodilation & reduce local effect
 - [D] no effect of anaesthetic agent observed
10. What are the consequences of drug interaction between warfarin and aspirin?
 - [A] toxicity to liver
 - [B] heart attack
 - [C] risk of bleeding
 - [D] rise in blood pressure
11. Nicotinic Ach receptors are present in following organ system except
 - [A] liver
 - [B] Muscle
 - [C] Ganglion
 - [D] CNS
12. One of the following drugs is an example of muscarinic agonist
 - [A] Atropine
 - [B] Oxybutynin
 - [C] Carbachol
 - [D] pirenzapine
13. M2 receptor producing major effect on following system
 - [A] Cardiac system
 - [B] Central nervous system
 - [C] Liver
 - [D] Glandular system
14. What is the toxic metabolite of paracetamol?
 - [A] N acetyl p benzoquinone imine
 - [B] N acetyl p benzoquinine
 - [C] N acetyl o benzoquinine
 - [D] N acetyl benzaldehyde
15. Dobutamine is used in cardiogenic shock due to
 - [A] Alpha 1 action
 - [B] Beta 1 action
 - [C] Beta 2 action
 - [D] Alpha 2 action
16. Which of the following sympathomimetics is a beta2-selective agonist?
 - [A] Isoproterenol
 - [B] Xylometazoline
 - [C] Dobutamine
 - [D] Terbutalin

17. What are the major effects of atropine on Eyes?
 - [A] Myosis
 - [B] Drieness of Eye
 - [C] Mydriasis & Cycloplegia
 - [D] All of above
18. One of the following is not a clinical use of *alpha adrenergic antagonist*.
 - [A] Cardiac arrest
 - [B] Severe Hypertension
 - [C] Benign Prostatic hypertrophy
 - [D] Pheochromocytoma
19. What are the major clinical uses of Beta adrenergic antagonist.
 - [A] Angina pectoris & glaucoma
 - [B] Myocardial infarction & heart failure
 - [C] Both A & B
 - [D] Liver disease
20. One of the following drug is an example of Prodrug.
 - [A] Gentamicin
 - [B] Tetracyclin
 - [C] Morphin
 - [D] Levodopa

SECTION – II

Q 2 Attempt any FOUR of the following

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|---|--|----|
| A | Explain concept of Cholinergic and Noradrenergic transmission and provide details of drugs acting on each pathways | 05 |
| B | Explain Pharmacological actions of Neuromuscular blocking drugs | 05 |
| C | Discuss in short drugs affecting Muscarinic receptors | 05 |
| D | Discuss in short drugs affecting adrenergic receptors | 05 |
| E | Provide side effects & clinical uses of Beta agonist & antagonist | 05 |
| F | Provide detail note on Acetylcholine synthesis and release | 05 |

SECTION – III

Q 3 Attempt any FOUR of the following

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| A | Write a note on oral route of drug administration. | 05 |
| B | Discuss about various targets of G-protein coupled receptor. | 05 |
| C | Write a note on enzyme induction and enzyme inhibition. | 05 |
| D | Enlist Phases of clinical trial. discuss Phase-I trial in detail. | 05 |
| E | Write a note on ganglionic stimulants | 05 |
| F | Discuss characteristics and mechanism of local anesthetics | 05 |

Q 4 Attempt any FOUR of the following

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|---|---|----|
| A | Give molecular classification of receptors. Write a note on nuclear receptor. | 05 |
| B | Discuss about factors affecting absorption of drug. | 05 |
| C | Write a note on pharmacokinetic drug interaction. | 05 |
| D | Gve the advantages and diadvantages of parentral route of drug administration. | 05 |
| E | Define Bioavailability and bioequivalence. Give significance of bioavailability | 05 |
| F | Discuss teratogenicity in detail. | 05 |
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