BRAINWARE UNIVERSITY

Term End Examination 2023
Programme – B.Pharm-2019/B.Pharm-2020/B.Pharm-2021
Course Name – Pharmacology I
Course Code - BP404T
(Semester IV)

Full Marks : 75 **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

1. *Choose the correct alternative from the following :*

(i) Name of a drug accepted by a scientific body USAN (united state adopted names) council is :

a) Generic name
b) Chemical name
c) Brand name
d) None of these

(ii) Choose the correct option: Beta blockers are contraindicated in all of the following except one

a) Diabetes
b) Congestive heart failure
c) Angina
d) Asthma

(iii) Select the correct statement from the following regarding cell membrane

a) Lipids are arranged in a bilayer with polar heads towards the inner part
b) Na+ and K+ ions move across cell membrane by passive transport
c) Fluid mosaic model of cell membrane was proposed by Singer and Nicolson
d) Proteins make up 60 to 70% of the cell membrane

(iv) Insulin produces their action by acting on its specific receptor. Identify the receptor.

a) G-protein receptor
b) Tyrosine kinase receptor
c) Ion channel receptor
d) Cytosine receptor

(v) Identify a selective α1 antagonist drug

a) Methoxamine
b) Phentolamine
c) Prazosin
d) Clonidine

(vi) Define Half life (t ½).

a) Metabolize a half of an introduced drug into the active metabolite
b) Change the amount of a drug in plasma by half during elimination
c) Absorb a half of an introduced drug
d) Bind a half of an introduced drug to plasma proteins

(vii) For steroidal hormone signaling one of the following receptor is selected

a) GPCR
b) Ion channel
c) Nuclear receptor
d) None of these

(viii) Choose the drug not having an amide?

a) Lignocaine b) Mepivacaine
c) Procaine d) Dibucaine

(ix) Choose the neurotransmitters playing a major role in psychosis

a) Cholinergic b) GABAergic
c) Dopaminergic d) Adrenergic

(x) Determine the antidepressant inhibiting monoamine oxidase

a) Amitryptalline b) Chlogyline
c) Amoxapine d) None of these

(xi) Choose the drug acting as an atypical antidepressant

a) Imipramine b) Maclobemide
c) Fluvoxamine d) Mianserin

(xii) Flumazenil acts as

a) Diazepam inverse agonist b) Diazepam antagonist
c) Opioid antagonist d) Opioid inverse agonist

(xiii) The hyperexcitability of neurons is associated to

a) Potentiation of exicitatory neurotransmitter b) Antagonism of inhibitory transmitter
c) Presynaptic control of neurotransmitter d) All of these

(xiv) Identify the antipsychotics that does not have extrapyramidal side effect

a) Haloperidol b) Resperidone
c) Chlorpromazine d) Clozapine

(xv) The birth of experimental pharmacology is associated with:

a) Francois Magendie b) Rudolf Buchheim
c) Claude Bernard d) Oswald Schmiedeberg

(xvi) Sub-discipline of pharmacology dealing with the effects of drugs in humans, described as

a) Clinical Pharmacology b) Theoretical Pharmacology
c) Experimental Pharmacology d) All of these

(xvii) Identify the phase II metabolic reactions that makes phase I metabolites readily excreted in urine.

a) Oxidation. b) Reduction.
c) Glucuronidation d) Hydrolysis.

(xviii) Select the correct option: The EC50 refers to the drug concentration at which:

a) One -half the maximum response is achieved b) The maximal effect is achieved
c) Tolerance is likely to be observed d) None of these

(xix) Identify the Drug that bind to membrane directly regulating the function by signal transduction

a) Acetylcholine b) Benzodiazepine
c) Barbiturate d) All of the these

(xx) Identify the factors contributing to the unequal distribution of drugs are all except:

a) Binding to plasma proteins b) Cellular binding
c) Concentration in body fat d) Heterogeneity of the drug

Group-B

(Short Answer Type Questions) 5 x 7=35

2. Describe the different types of parenteral route of drug administration (5)
3. Describe clinical pharmacology. (5)
4. Describe the different steps of Neurohumoral Transmission. (5)
5. Describe Drug antagonism with examples (5)

6. Write a short note on opioid analgesics and antagonist. (5)
7. With the help of a diagram explain the treatment of Myasthenia gravis. (5)

OR

Differentiate between Adverse drug reaction and Adverse drug event. (5)

8. Classify skeletal muscle relaxant and give two examples of centrally acting skeletal muscle relaxant with their mechanism of action. (5)

OR

Write a short note on myasthenia gravis. (5)

Group-C

(Long Answer Type Questions) 10 x 2=20

9. Enumerate the significance of volume of distribution and renal clearance (10)
10. Define drug abuse. Write down the difference between drug addiction and drug habituation and explain the treatments of morphine poisoning. (10)

OR

Classify the drugs with example used for the treatment of parkinsonism focusing on the benefit obtained when carbidopa is used along with levodopa (10)

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