

**BACHELOR OF PHYSIOTHERAPY  
THIRD SEMESTER (SPECIAL REPEAT)  
PHARMACOLOGY  
BPT-305**

(Use separate answer scripts for Objective & Descriptive)

Duration : 3 hrs.

Full Marks : 70

[ **PART-A: Objective** ]

Time : 20 min.

Marks : 20

*Choose the correct answer from the following:*

*1 × 20 = 20*

- Following reflexes are autonomic except
  - Salivary secretion
  - Micturition
  - Flexion of arm following painful stimulation
  - Increase heart rate
- The toxin that inhibits the release of Acetylcholine in synaptic cleft is
  - Black widow spider
  - Botulinum
  - Hemicholinium
  - Atropine
- Muscarinic receptors are
  - Ligand gated ion channel
  - G protein coupled receptors
  - Transmembrane enzyme linked receptors
  - JAK- STAT binding receptors
- Gland located superior to kidney.
  - Pituitary
  - Adrenal
  - Ovaries
  - Pancreas
- Which among the hormones are responsible for fight or flight response?
  - Epinephrine and nor epinephrine
  - Insulin and Glucagon
  - Estrogen and progesterone
  - Tyroxine and melatonin
- Following is GABA agonist
  - Muscimol
  - Baclofen
  - Bicuculline
  - None of the above
- Route of administration which shows 100% bioavailability is
  - Oral
  - IM
  - IV
  - SC
- Opioid antagonist is
  - Fentanyl
  - Methadone
  - Pentazocine
  - Naloxone
- In which stage anesthetic surgery can be performed?
  - Stage I
  - Stage II
  - Stage III
  - Stage IV

10. Isoproterenol can cause \_\_\_\_\_ as an adverse effect.
- a Cardiac arrhythmias
  - b Nephrotoxicity
  - c CNS damage
  - d Ototoxicity
11. Which of the following has both antimalarial and antirheumatic property?
- a Chloroquine
  - b Sulfasalazine
  - c Infliximab
  - d Prednisolone
12. \_\_\_\_\_ is the precursor for prostaglandin.
- a Arachidonic acid
  - b Prostacyclin
  - c Thromboxane
  - d None of the above
13. Which of the following is a rapid acting immunotherapy in the treatment of Myasthenia gravis?
- a Rituximab
  - b Cyclophosphamide
  - c Plasma Exchange
  - d Mycophenolate mofetil
14. Which of the following is an anti-cholinesterase inhibitor?
- a Prednisone
  - b Azathioprine
  - c Cyclosporine
  - d Pyridostigmine
15. Which of the following drug prevents secondary hyperuricemia?
- a NSAIDs
  - b Colchicine
  - c Corticosteroids
  - d Allopurinol
16. Which of the following is an antihypertensive vasodilator?
- a Captopril
  - b Spironolactone
  - c Propanolol
  - d Sodium Nitroprusside
17. Which of the following class of drugs shorten phase 2 (the plateau) of the cardiac action potential?
- a Class IA sodium channel blockers
  - b Beta adrenergic blockers
  - c Calcium channel blockers
  - d Potassium channel blockers
18. Which of the following diuretics blocks the  $\text{Na}^+ - \text{K}^+ - 2\text{Cl}^-$  symport?
- a Loop diuretics
  - b Thiazides
  - c Carbonic anhydrase inhibitors
  - d Potassium sparing diuretics
19. Acetazolamide inhibits the enzyme \_\_\_\_\_
- a Protease
  - b Amylase
  - c Lipase
  - d Carbonic Anhydrase
20. Aldosterone release is stimulated by
- a Angiotensin I
  - b Angiotensin II
  - c Oxytocin
  - d Vasopressin

( PART-B : Descriptive )

Time : 2 Hrs. 40 mins.

Marks : 50

[ Answer question no.1 & any four (4) from the rest ]

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|---|----------|
| 1. Classify Nonsteroidal anti-inflammatory drugs with suitable examples. Discuss pharmacological action, adverse drug reaction and therapeutic effects of aspirin.                      | 4+6=10   |
| 2. Write a note on the classification of cardiac arrhythmias. Describe the role of K <sup>+</sup> channel blockers and calcium channel blockers in the treatment of cardiac arrhythmias | 4+6=10   |
| 3. a) Discuss the pharmacotherapy of cough.<br>b) Discuss the pharmacotherapy of asthma.  | 5+5=10   |
| 4. a) What are the various stages of anesthesia?<br>b) Give a brief account on anyone of the intravenous general anaesthetics.  | 5+5=10   |
| 5. a. Discuss briefly the classification of oral hypoglycemic agents.<br>b. Write a note on Insulin.  | 5+5=10   |
| 6. Write notes on:<br>a) Insulin<br>b) Oral hypoglycemic agents- Sulfonylureas and biguanides   | 5+5=10   |
| 7. What are diuretics? Classify diuretics. Write a note on thiazide diuretics.  | 2+3+5=10 |
| 8. a) What is hypertension and explain the principle of antihypertensive therapy<br>b) Elaborate on ACE inhibitors.   | 5+5=10   |

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