

Manipal College of Pharmaceutical Sciences
Manipal Academy of Higher Education, Manipal
BPharm - V Semester BPharm
End Semester Theory Examination (Make-up), Jan 2023

Course: PHA-BP503T

Course code: Pharmacology-II (Theory)

Date: 20-01-2023

Time: 9:00 am - 12:00 noon

Max. Marks: 75

Answer all questions

Section - II

Long Answers

(10 Marks x 2 = 20 Marks)

1. Explain the mechanisms and adverse effects of warfarin and heparin.
2. Classify oral hypoglycaemic agents with examples. With a neat diagram, explain the mechanism of action of any two classes of drugs

Section - II

Short Answers

(5 Marks x 7 = 35 Marks)

1. Explain the role of RAAS in hypertension. Giving examples of drugs illustrate how RAAS inhibitors are useful in controlling hypertension.
2. Illustrating the effect of quinidine on action potential of SA nodal cells, explain its role in the treatment of arrhythmia.
3. With the help of a diagram, explain how furosemide produces diuretic effect.
4. Explain a method to conduct the bioassay of a) adrenaline and b) acetylcholine
5. Explain the two therapeutically useful pharmacological actions of steroids
6. Explain the synthesis of thyroid hormones. Mention how antithyroid drugs interfere with this process
7. Write short notes on oral contraceptives

Section – I Multiple Choice Questions (1 Marks x 20 = 20 Marks) (Reg. No-----)

1. Which among the following is predominantly a sodium channel blocker -
 - a. Lidocaine
 - b. Amiodarone
 - c. Verapamil
 - d. Sotalol
2. Which among the following directly modulates RAAS pathway?
 - a. Diltiazem
 - b. Losartan
 - c. Prazocin
 - d. Minoxidil
3. Which among the following is a potassium channel opener?
 - a. Diltiazem
 - b. Propranolol
 - c. Nicorandil
 - d. Glyceryl trinitrate
4. Vitamin K is also known as?
 - a. Cobalamin
 - b. Folic acid
 - c. Calciferol
 - d. Phytonadione
5. Identify the anticoagulant from the following?
 - a. Vitamin K
 - b. Vitamin D
 - c. Warfarin
 - d. Vitamin C
6. Which among the following inhibits an enzyme in the cholesterol synthesis pathway?
 - a. Simvastatin
 - b. Ezetimibe
 - c. Cholestyramine
 - d. Nicotinic acid
7. Identify the antiplatelet drug?
 - a. Dipyridamole
 - b. Streptokinase
 - c. Warfarin
 - d. Epsilon amino caproic acid
8. Which among the following inhibits H1 receptors?
 - a. Ranitidine
 - b. Cetirizine
 - c. Sumatriptan
 - d. Omeprazole
9. Which among the following exerts diuretic effect due to its osmotic properties?
 - a. Spironolactone
 - b. Furosemide
 - c. Hydrochlorothiazide
 - d. Mannitol
10. Which method is used for the bioassay of d-tubocurarine
 - a. Hot-plate method
 - b. Rabbit head drop method
 - c. Mouse convulsion method
 - d. Straub tail reaction

11. Based on staining characteristics, the following cells are grouped as Basophils EXCEPT
 - a. Gonadotropes
 - b. Somatotrope
 - c. Thyrotropes
 - d. Corticotropelipotropes
12. Gonadotropins are acting through
 - a. Specific G protein-coupled receptors, activation of adenylate cyclase
 - b. Specific G protein-coupled receptors, activation of Phospholipase C
 - c. Nuclear Receptor
 - d. Enzyme-linked receptor
13. Mechanism of action of Oxytocin is through
 - a. Specific G protein-coupled receptors, activation of adenylate cyclase
 - b. Specific G protein-coupled receptors, activation of Phospholipase C
 - c. Nuclear Receptor
 - d. Enzyme-linked receptor
14. Which of the following is a selective estrogen receptor modulator:
 - a. Raloxifene
 - b. Mifepristone
 - c. Danazol
 - d. Anastzole
15. All of the following preparations of insulin are rapid and short acting EXCEPT
 - a. Lispro
 - b. Aspart
 - c. Glargine
 - d. NPH
16. Which of the following drug is taken during the first part of the meal for the purpose of delaying absorption of dietary carbohydrates?
 - a. Nateglinide
 - b. Pioglitazone
 - c. Acarbose
 - d. Glipizide
17. Mechanism of action of bromocriptine is via
 - a. Agonism at D2 receptor
 - b. Antagonism at D2 receptor
 - c. Antagonism at D1 receptor
 - d. Antagonism at α receptor
18. A drug 'X' primarily reduces the static component of urinary obstruction in BPH and takes more than 3 months to exert its beneficial effect. Which of the following is 'X'?
 - a. Tamsulosin
 - b. Terazosin
 - c. Finasteride
 - d. Amphetamine
19. All are true about Rey's Syndrome EXCEPT:
 - a. Hepatic encephalopathy
 - b. Seen with ampicillin therapy
 - c. Fever and Rash
 - d. Viral associated
20. NSAID lacking anti-inflammatory action is
 - a. Paracetamol
 - b. Ibuprofen
 - c. Diclofenac sodium
 - d. Celecoxib