

Time: 3Hrs.

Marks:75

Q.1. Choose an appropriate option for the following multiple choice based questions. (20M)

1. _____ is a false neurotransmitter and potent vasoconstrictor
 - a. Methyldopa
 - b. Clonidine
 - c. Methyl adrenaline
 - d. Reserpine

2. _____ is the phosphodiesterase 3 inhibitor used in congestive heart failure
 - a. Minoxidil
 - b. Milrinone
 - c. Methamphetamine
 - d. Metoprolol

3. _____ diuretic is preferred to be given with cardiac glycoside to reduce latter's toxicity
 - a. Loop diuretics
 - b. Potassium sparing
 - c. High ceiling diuretics
 - d. Thiazide diuretics

4. Nitrates are used as antianginal drugs as they can
 - a. Reduce preload
 - b. Reduce afterload
 - c. Reduce preload and afterload
 - d. Reduce preload and increase afterload

5. _____ is the most serious complication of anticoagulants
 - a. Hypertension
 - b. Bleeding
 - c. Lethargy
 - d. Insomnia

6. Non-haem iron is best absorbed in the _____ form
 - a. Fe-
 - b. Fe²⁺
 - c. Fe³⁺
 - d. Fe⁴⁺

7. Vasopressin-2 receptors are located primarily on _____
 - a. Smooth muscles
 - b. Platelets
 - c. Collecting duct of kidney and ascending loop of Henle
 - d. Liver

8. Hyperkalemia due to potassium sparing diuretics would be exacerbated by combining it with _____
 - a. Carbonic anhydrase inhibitors
 - b. Thiazide diuretics
 - c. Loop diuretics
 - d. ACE inhibitors

9. Following are the action of Bradykinin EXCEPT

- a. Bronchodilation
- b. Vasodilation
- c. Pain
- d. Increase in vascular permeability

10. Among the disease-modifying antirheumatic medications, _____ provides the fastest symptom alleviation.

- a. Sulfasalazine
- b. Hydroxychloroquine
- c. Methotrexate
- d. Auranofin

11. The following is a selective 5-HT_{1B/1D} receptor agonist:

- a. Buspirone
- b. Ondansetron
- c. Sumatriptan
- d. α -methyl 5-HT

12. _____ enzyme catalyses the conversion of arachidonic acid to prostaglandins

- a. Lipoxygenase
- b. Phospholipase A₂
- c. Cyclooxygenase-1
- d. Cytochrome P450

13. _____ is contraindicated in patients with a history of cardiovascular events.

- a. Ibuprofen
- b. Indomethacin
- c. Diclofenac
- d. Celecoxib

14. _____ is the most appropriate initial oral agent for management of Type-2 diabetes with no comorbid conditions.

- a. Acarbose
- b. Pioglitazone
- c. Sitagliptin
- d. Metformin

15. _____ is used in obstetrics to stimulate uterine contraction and induce labor

- a. Somatostatin
- b. Oxytocin
- c. Prolactin
- d. Vasopressin

16. _____ inhibits thyroid peroxidase which is required in intrathyroidal oxidation of iodide.

- a. Radioactive iodine
- b. Thiocyanates
- c. Propylthiouracil
- d. Nitrates

17. _____ is the naturally occurring female hormone.

- a. Mestranol
- b. Ethinylestradiol
- c. Estrone
- d. Diethylstilbestrol

18. _____ is an anabolic steroid

- a. Oxymetholone
- b. Androstenedione
- c. Dydrogesterone
- d. Pitocin

19. In developing males within the womb, the receptor cells in hypothalamus respond to all EXCEPT

- a. Estrogen
- b. Androgen
- c. Gonadotropins
- d. Testosterone

20. The _____ is a type of biological variation in bioassay

- a. Lack of standardized procedure
- b. Calculative errors
- c. Loss of tissue sensitivity
- d. Improper dilutions of standard solution

Q.2. Long Answers (Answer Any 2 out of 3)

(20M)

1. Enlist antihyperlipidemic. Elaborate on mechanism of action and adverse effect of each class
2. Classify anti-platelet drugs. Give mechanism of action, uses and adverse effects of non-selective irreversible COX inhibitor
3. Classify antirheumatic drugs with examples and give a detailed account on biological agents.

Q.3.Short Answers (Answer 7 out of 9)

(35M)

1. Explain in detail class I antiarrhythmics
2. Comment on dihydropyridines as anti-anginal drugs.
3. Describe plasma volume expanders with examples and give an account on its uses.
4. Give pharmacological actions of 5-HT
5. Write a note on hormones regulating plasma calcium levels
6. Give a detailed account on insulin secretagogues
7. Discuss uses and adverse effects of systemic corticosteroids in detail
8. Give a note on Oral contraceptives
9. Discuss in detail bioassay of vasopressin
