

(3 Hours)

[Total Marks: 75]

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

- 1 The mechanism of action of phosphodiesterase III inhibitors is to _____
 - a Inhibit degradation of cAMP to 5'-AMP
 - b Degrade cAMP to 5'-AMP
 - c Inhibit degradation of 5'-AMP to cAMP
 - d Degrade 5'-AMP to cAMP

- 2 Therapeutic use of ACE inhibitors
 - a Hyperlipidaemia
 - b Hypertension
 - c Arrhythmia
 - d Angina

- 3 The drug act as a false neurotransmitter and used in treatment of hypertension
 - a Simvastatin
 - b Spironolactone
 - c Digitalis
 - d Methyldopa

- 4 The sodium channel blocker class that moderately delay channel recovery, suppress conduction and prolongs refractoriness
 - a IA
 - b IB
 - c IC
 - d Both IB and IC

- 5 _____ is a Coumarin anti-coagulant
 - a Heparin
 - b Warfarin
 - c Bivalirudin
 - d Desirudin

- 6 _____ is a prodrug used in anti-platelet therapy
 - a Streptokinase
 - b Dipyridamole
 - c Clopidogrel
 - d Tranexamic acid

- 7 Vasopressin analogues are contraindicated in patients suffering from _____
- a Hypertension
 - b Haemophilia
 - c Diabetes insipidus
 - d Bleeding oesophageal varices
- 8 Spironolactone, being a synthetic steroid has a potential to induce _____ in male patients.
- a Glaucoma
 - b Heart failure
 - c Hypokalaemia
 - d Gynecomastia
- 9 The following is a symptom of gout
- a Purple or red skin, swelling in joints
 - b Muscle weakness, muscle aches or muscle cramps
 - c breast tenderness or swelling
 - d Bluish tone to the skin
- 10 _____ is a cyclooxygenase irreversible inhibitor
- a Indomethacin
 - b Piroxicam
 - c Aspirin
 - d Phenylbutazone
- 11 Among the disease modifying antirheumatic drugs, fastest symptom relief is obtained with _____
- a Methotrexate
 - b Sulfasalazine
 - c Hydroxychloroquine
 - d Auranofin
- 12 NSAIDs should be avoided in _____ condition
- a Urine infection
 - b Diabetes mellitus
 - c Irritable bowel syndrome
 - d COPD

- 13 Which of the following enzyme is essential for the conversion of histidine to histamine?
- a Histidine amylase
 - b Histidine hydrolase
 - c Histidine decarboxylase
 - d Histidine phosphorylase
- 14 Thyroid hormones (T3 and T4) acts through _____
- a G-Protein coupled receptor
 - b Nuclear receptor
 - c Ion channel receptor
 - d JAK-STAT binding receptor
- 15 _____ is an insulin sensitizer
- a Acarbose
 - b Miglitol
 - c Glimepiride
 - d Metformin
- 16 Secretion of _____ hormone is inhibited by action of dopamine at D2 receptors.
- a Prolactin
 - b Corticotropin
 - c Somatostatin
 - d Gonadotropin
- 17 The drug used for cervical priming to facilitate labour is
- a Oxytocin
 - b Stilboestrol
 - c Progesterone
 - d Prostaglandin E2
- 18 High level of estrogen is responsible for _____
- a Increased risk of lung cancer
 - b Increased risk of stomach cancer
 - c Increased risk of breast cancer
 - d Swelling in joints

- 19 The _____ class of drug useful in treatment of prostatic hypertrophy
- Alpha reductase inhibitor
 - Estrogen agonist
 - Progesterone antagonist
 - Phosphodiesterase inhibitors
- 20 A pregnant woman may experience an abortion if prostaglandin E2 (PGE2) is administered to her. What is the best justification for this discovery?
- PGE2 causes constriction of the arteries leading towards the placenta
 - PGE2 stimulates the release of oxytocin from the posterior pituitary
 - PGE2 strongly stimulates uterine contraction
 - PGE2 increases the secretion of progesterone from the corpus luteum

Q.2. Long answers (Answer any 2 questions out of 3 questions) (20M)

- 1 Classify the antihyperlipidemic drugs and give example of each class. Give detailed mechanism of action and adverse effect of any two class.
- 2 Classify Diuretics giving example of each class. Give mechanism of action, uses and adverse effects of Loop diuretics.
- 3 Classify and discuss in detail disease modifying anti-rheumatoid drugs.

Q.3. Short answers (Answer any 7 questions out of 9 questions) (35M)

- 1 Write a note on Calcium channel blockers.
 - 2 Discuss the detailed account of plasma volume expanders.
 - 3 Classify anti-histaminic drugs. Differentiate between first and second generation anti-histaminics.
 - 4 Enlist drugs used in chronic gout and discuss any one class in detail.
 - 5 Give mechanism of action of Thiazolidinediones and DPP-4 inhibitors.
 - 6 Give a detailed account on treatment of Thyrotoxicosis.
 - 7 Write a note on Gonadotropin and Prolactin.
 - 8 Discuss in details digitalis bioassay.
 - 9 Write a short note on Oral contraceptives.
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