

UNIVERSITY OF MUMBAI

MOCK SEMESTER EXAMINATION- FH 2023 (Academic Year 2022-23)

M. Pharm. Sem. II

Subject: Advanced Pharmacology II

Duration: 3 Hours

Marks: 75

Q. 1 Attempt all multiple choice questions (MCQ)

20 M

1. The major cause of hypercalcemia in the adult is :
A Hyperparathyroidism B Anorexia C Renal failure and malabsorption
D Deficiency of vitamin D
2. This drug is contraindicated in patients with bronchial asthma
A Clonidine B Propranolol C Enalapril D Nifedipine
3. Sucralfate exerts its action as a virtue of
A Complete absorption B Systemic action C Local action D Mucosal binding
4. The immunosuppressive effect of glucocorticoids is caused by:
A. Activation of phospholipase A2 and reducing prostaglandin and leukotriene synthesis.
B. Suppression of cyclooxygenase II expression which results in reducing the amount of an enzyme available to produce prostaglandins
C. Reducing the concentration of lymphocytes (T and B cells) and inhibiting the function of tissue macrophages and other antigen-presenting cells
D. Induction of cyclooxygenase II expression results in reducing amount of an enzyme available to produce prostaglandins.
5. Azoles have an antifungal effect because of:
A Inhibition of cell wall synthesis
B Inhibition of fungal protein synthesis
C Reduction of ergosterol synthesis
D Inhibition of DNA synthesis
6. The antiviral action of amantadine is exerted through:
A Interaction with the viral M2 protein
B Interaction with a virus directed thymidine kinase
C Inhibition of a viral protease enzyme
D Inhibition of viral RNA-mediated DNA synthesis

7. Vinca alkaloids exert antitumor activity by:
- A Activating topoisomerase II causes breaks in DNA strands
 - B Crosslinking DNA strands
 - C Inhibiting DNA-mediated RNA synthesis
 - D Inhibiting polymerization of tubulin to form intracellular microtubules
8. Theophylline efficacy increases in chronotherapy of asthma when administered at ____
- A Night
 - B Morning
 - C Afternoon
 - D Evening
9. Leukotriene antagonists are used in bronchial asthma:
- A For terminating acute attacks
 - B As monotherapy in place of β_2 agonists
 - C As adjuvants to β_2 agonists for avoiding corticosteroids
 - D As nebulized powder in refractory cases
10. Drug Activating peroxisome proliferator-activated receptor $-\gamma$ (PPAR- γ) is _____
- A Glimepiride
 - B Metformin
 - C Pioglitazone
 - D Miglitol
11. A progestin and an estrogen are combined in oral contraceptive pill because
- A The estrogen blocks the side effects of the progestin
 - B The progestin blocks the side effects of the estrogen
 - C Both synergise to suppress ovulation
 - D Both synergise to produce hostile cervical mucus
12. Inhaled beclomethasone dipropionate should be used only in:
- A An acute attack of asthma
 - B Moderate to severe chronic asthma
 - C Status asthmaticus
 - D Asthma not responding to systemic corticosteroids
13. Nitric oxide synthase (NOS) responsible for immune response is _____.
- A Endothelial NOS
 - B Inducible NOS
 - C Neuronal NOS
 - D Epithelial NOS

- 14.** The mechanism of action of calcitonin is:
- A Inhibits hydroxyapatite crystal formation, aggregation, and dissolution
 - B Raises intracellular cAMP in osteoclasts
 - C Activates bone resorption
 - D Inhibits macrophages
- 15.** Combined chemotherapy of tuberculosis is used to:
- A Decrease mycobacterium drug-resistance
 - B Increase mycobacterium drug-resistance
 - C Decrease the antimicrobial activity
 - D Decrease the onset of antimycobacterial drugs biotransformation
- 16.** Clavulanic acid is combined with amoxicillin because:
- A It kills bacteria that are not killed by amoxicillin
 - B It retards renal excretion of amoxicillin
 - C It counteracts the adverse effects of amoxicillin
 - D It inhibits beta lactamases that destroy amoxicillin
- 17.** Which of the following drug inhibit viral reverse transcriptase
- A Zidovudine B Vidarabine C Rimantadine D Gancyclovir
- 18.** Mifepristone (RU-486) is:
- A Antiprogesterin B Antiandrogen C Antiestrogen D Androgen
- 19.** Which enzymes are the target for the quinolone antibacterial agents?
- A Topoisomerases
 - B Kinases
 - C Proteases
 - D Transpeptidase
- 20.** Which of the following is synthetic antibiotic?
- A Sulfanilamide
 - B Penicillin
 - C Actinomycin
 - D Neomycin

Q. II Attempt Any Two Questions

20 M

1. Classify alkylating agents and give their examples. Write a note on antimetabolites drugs for cancer therapy.
2. Classify oral hypoglycemic drugs. Discuss in detail the mechanism of action of each class.
3. Classify immunosuppressant drugs give their examples and discuss the mechanism of action, therapeutic uses and adverse effects of Sirolimus.

Q. III Attempt Any Seven Questions

35 M

1. Classify endogenous antioxidants. Explain the role of free radicals in the etiopathogenesis of Alzheimer's disease.
2. Discuss in detail the applications of chronotherapy in diabetes mellitus and hypertension
3. Discuss in brief the physiological roles of calcium. Write in detail the classification and pharmacology of Drugs regulating calcium regulations.
4. Discuss in detail the application of chronotherapy in peptic ulcers.
5. Classify antifungal drugs and discuss mechanisms of development of resistance to antifungal drugs.
6. Discuss pharmacotherapy for Asthma
7. Explain the term prokinetic drugs? Give mechanism, adverse effects and therapeutic uses of prokinetic drugs.
8. Enlist first-line and second-line antitubercular drugs. Discuss mechanisms of action and side effects of first-line antitubercular drugs.
9. Classify antithyroid drugs. Discuss in detail the Pharmacology of antithyroid drugs.
