



UNIVERSITY WITH A PURPOSE

**UNIVERSITY OF PETROLEUM AND ENERGY
STUDIES**

End Semester Examination, December 2021

Program: MSc Clinical Research

Semester: III

Course: Pharmacotherapeutic-II

Duration: 03 hours


Course Code: HSCR8002

Max. Marks: 100

Instructions: All questions are compulsory

| SECTION A (Type the answers in test box) | | (20Q x1.5M= 30 Marks) | CO |
|---|---|----------------------------------|------------|
| | MCQs, One or two line answers, True/False, Fill in the blanks | 1.5 | |
| Q1 | Which of the following terms refers to the ability of an antimicrobial drug to harm the target microbe without harming the host? a. Mode of action b. Therapeutic level c. Spectrum of activity d. Selective toxicity | 1.5 | CO1 |
| Q2 | Which of the following is not a type of β -lactam antimicrobial? a. Penicillins b. Glycopeptides c. Cephalosporins d. Monobactams | 1.5 | CO1 |
| Q3 | Citrullination is conversion of _____ to citrulline a. Threonine b. Arginine c. Methionine d. Tryptamine | 1.5 | CO1 |
| Q4 | Bronchodilator in COPD- a. Anticholinergics b. Antiadrenergic c. Cholinergic d. Alpha agonists | 1.5 | CO1 |
| Q5 | The drug of choice for obsessive compulsive disorder is which one of the following- a. Sertraline b. Amoxapine c. Hydroxyzine d. Alprazolam | 1.5 | CO1 |
| Q6 | On chronic treatment with a drug, patient presents with gingival hyperplasia and facial hirsutism. The drug most likely to cause these side-effects is- a. Phenytoin b. Carbamazepine c. Valproic acid | 1.5 | CO1 |

| | | | |
|-----|---|-----|-----|
| | d. Phenobarbitone | | |
| Q7 | Write names of hormones secreted from adrenal gland | 1.5 | CO1 |
| Q8 | What is teratogenicity | 1.5 | CO1 |
| Q9 | Name three drugs used in Alzheimer's disease | 1.5 | CO1 |
| Q10 | Which of the following induction agent is the most suitable for day care surgery? a. Morphine b. Propofol c. Diazepam d. Ketamin | 1.5 | CO2 |
| Q11 | Drug used in cancer chemotherapy induced vomiting is? a. Aprepitant b. Dexamethasone c. Ondansetron d. All of the above | 1.5 | CO2 |
| Q12 | Acamprostate is used for- a. Alcohol abstinence b. Nicotine abstinence c. Opioid abstinence d. Cocaine abstinence | 1.5 | CO2 |
| Q13 | Which of the following SSRIs is a prodrug? a. Paroxetine b. Citalopram c. Fluvoxamine d. Fluoxetine | 1.5 | CO2 |
| Q14 | Define pharmacogenomics | | CO2 |
| Q15 | Which prostaglandin is used in NSAID induced ulcer a. Misoprostol b. Carboprost c. Mirtazapine d. Miprinone | 1.5 | CO3 |
| Q16 | The primary goal of glucocorticoid treatment in rheumatoid arthritis is? a. Suppression of inflammation and improvement in functional capacity b. Reversal of degenerative process c. Development of a sense of wellbeing in patients d. Prevention of prevention of suppression of the hypothalamic pituitary-adrenal axis | 1.5 | CO3 |
| Q17 | The drug not used for analgesia in a head injury patient is a. Morphine b. NSAIDs c. Rofecoxib d. Acetaminophen | 1.5 | CO3 |
| Q18 | Drug of choice of hypertension in pregnancy a. Methyldopa b. Thiazide c. Metoprolol d. Labetalol | 1.5 | CO3 |

| | | | |
|-----|--|--------------------------|-------------|
| Q19 | Your 60 year old male hypertensive patient who had an myocardial infarction a year ago is now showing signs of CHF. You therefore add spironolactone to his drug regimen. What side effect should you warn him about? | 1.5 | CO3 |
| Q20 | True about benzodiazepine is- a. GABA mimetic b. GABA facilitator c. Not a safe drug d. Powerful enzyme inducer | 1.5 | CO4 |
| | SECTION B (Scan and upload) Short Answer Type Question (Word limit 200) | (4Qx5M=20 Marks) | CO |
| Q1 | Write a note on Hypolipidaemic drugs | 5 | CO2 |
| Q2 | Classify Anti-epileptics drugs. | 5 | CO2 |
| Q3 | Explain the site of action for antidepressant drugs? | 5 | CO2 |
| Q4 | Write a note on mechanism of action of alcohol and its inhibitor in CNS | 5 | CO3 |
| | SECTION C (Scan and upload) | (2Qx15M=30 Marks) | CO |
| | Please answer the questions in briefly with correct logic and reasoning. | | |
| Q1 |  <p>A patient has severe allergic reaction and has been suggested to take a medication required in advance cases of allergy. Somehow the patient continues to take the medicine for long time. The patient has come to the Dr. with complaint of muscular weakness, increase urination and swelling on face and shoulder (moon face). The Dr. immediately decides to go for some test and observed the signs of hyperglycemia, osteoporosis and increased urinary level of uric acid. However, the patient is unaware of the drug he has been administering. Being a pharmacologist the Dr. has contacted you for better understanding of situation:</p> <ol style="list-style-type: none"> Please help the Dr. to figure out the drug for severe allergic reaction involved. Name the disease a patient might be suffering with and indicate the drugs to be used in treatment. Explain him the reason behind moon face, hyperglycemia, osteoporosis due to the drug. | (3+5+7) | CO3, CO4 |
| Q2 | A 72-year-old man presents to the office for routine follow-up. He is under treatment for hypertension and congestive heart failure with | (5+3+4+3) | CO3 CO4 |

| | | | |
|----|--|------------------------------|------------|
| | <p>enalapril and a diuretic. His blood pressure is under acceptable control and he has no symptoms of heart failure at present. He does complain that he has been coughing frequently in the past few months. History and examination reveal no other cause of a chronic cough, so you decide to discontinue his enalapril and start another drug.</p> <p>a. What another drug will most probably be given and briefly writes its mechanism? b. What is the mechanism of action of enalapril? c. By what mechanism does enalapril convert to its active form enalaprilat? d. What is the likely cause of the cough?</p> | | |
| | SECTION- D | (2Qx10M=20 Marks) | CO |
| | (Scan and upload) Long Answer type Question (word limit 500) | | |
| Q1 | Describe the pathophysiology of Asthma and pharmacotherapy of Asthma. | (5+5) | CO1 CO4 |
| Q2 | a. Write a note on drug resistance and its type. b. Discuss the role of diuretics in management of hypertension. | (5+5) | CO1 CO4 |