

Instructions:

- All questions are compulsory
- Draw diagrams wherever necessary
- Answers of Questions and Sub-questions must be written strictly according to serial order of question paper.
- MCQ has to be answered in theory answer book
- Please write MCQ answer neatly and in serial order with black or blue pen in brackets; for example: - 1. (a) 2. (c)
- MCQ has to be answered only once, any kind of repetition or cutting or erasing or whitener will be considered as malpractice, such answers will not be counted in marks and action will be taken according to UFM rules of university.
- Subjective answer should be answered in up to 30 words per marks. For example, if a question having 2 marks should answered in up to 60 marks.

Q1. Total MCQs: 10**10 x 1 = 10**

1. Which of the following has the highest potential to cause metabolic syndrome?			
(a) Clozapine	(b) Ziprasidone	(c) Haloperidol	(d) Aripiprazole
2. Which of the following drugs is effective in both Grand Mal and Petit Mal Epilepsy?			
(a) Phenobarbitone	(b) Phenytoin	(c) Carbamazepine	(d) Sodium Valproate
3. Drug which is NOT used in a patient of severe complicated Falciparum malaria:			
(a) Chloroquine	(b) Quinine	(c) Artesunate	(d) Artemether
4. Which insulin analogue can be administered intravenously?			
(a) Insulin Glargine	(b) Insulin Lispro	(c) Insulin Degludec	(d) Insulin Detemir
5. Antipyretic Analgesic devoid of significant Anti-inflammatory effect is:			
(a) Paracetamol	(b) Ketoprofen	(c) Piroxicam	(d) Aspirin
6. Drug of choice for neutropenia due to cancer chemotherapy is:			
(a) IL-11	(b) Erythropoietin	(c) Filgrastim	(d) Vitamin-B12
7. ADR caused by bisphosphonates:			
(a) Hepatotoxicity	(b) Esophageal Ulcers	(c) Tachycardia	(d) Osteoporosis
8. Which local anesthetic agent is associated with a higher risk of methemoglobinemia?			
(a) Bupivacaine	(b) Prilocaine	(c) Lidocaine	(d) Procaine
9. Which class of antibiotics exhibits concentration-dependent killing and is characterized by a post-antibiotic effect?			
(a) Aminoglycosides	(b) Fluoroquinolones	(c) Tetracyclines	(d) Macrolides
10. Which drug is a somatostatin analog used for the treatment of acromegaly and neuroendocrine tumors?			
(a) Levothyroxine	(b) Desmopressin	(c) Octreotide	(d) Insulin lispro

Q2. Long Answer Questions

2 x 20 = 40

- a. A 19-year-old man is brought to the OPD by his mother. He has been kicked out of the hostel for his "bizarre" behavior. He has accused several fellow students and professors of spying on him for the CIA. He stopped attending his classes and spends all of his time watching TV because the announcers are sending him secret messages on how to save the world. He has stopped bathing and will only change his clothes once a week. His physical examination and blood tests are normal. A drug screen is negative. You diagnose him with acute psychosis secondary to schizophrenia, admit him to the psychiatric unit of the hospital, and start him on haloperidol. (6+6+8=20)
1. What is the pharmacological basis of the use of Haloperidol in this condition?
 2. What are the advantages of Atypical Antipsychotics over the Typical Antipsychotics?
 3. Explain the important ADRs caused by Typical Antipsychotic drugs along with the treatment of those ADRs.
- b. A 58-year-old male weighing 55 kg presented with complaints of cough with expectoration, fever, and night sweats since the last 4 weeks. He started experiencing shortness of breath since the last 4 days. X-ray chest revealed a patchy area of consolidation. Sputum smear was positive for Acid Fast Bacilli. There is no previous history of similar symptoms or treatment taken for Tuberculosis. He was prescribed treatment for Tuberculosis based on NTEP guidelines. (4+10+6=20)
1. What is the Treatment Regime for Drug Susceptible Tuberculosis as per current NTEP Guidelines?
 2. What is the basis of the use of these drugs in this regime? Enumerate the important ADRs of these drugs.
 3. What do you mean by Drug Resistant Tuberculosis? Enumerate second-line Anti-TB Drugs.

Q3. Brief Answer Questions

6 x 05 = 30

- a. Explain why abrupt cessation of Glucocorticoids after prolonged therapy is not advised? Enumerate the long-term ADRs of Corticosteroids.
- b. Why are SSRIs preferred in patients of Depression over other drugs?
- c. Rationale for using Low-dose Aspirin as an Antiplatelet drug.
- d. Describe the management of Diabetic Ketoacidosis.
- e. Write regimes used for Emergency Contraception explaining their mechanism of action.
- f. Enumerate drugs used and explain their mechanism for action in the prophylaxis of migraine.

Q4. Short Answer Questions

10 x 2 = 20

- a. Why Levodopa is not used in drug-induced parkinsonism?
- b. Why Morphine is contraindicated in Head injury patients?
- c. Why Oxytocin and not Ergometrine is used in Induction of Labour?
- d. Write two drugs effective in the treatment of Methicillin-resistant Staphylococcal infections.
- e. Drugs used in Acute attack of Migraine.
- f. Why Adrenaline is combined with Lidocaine?
- g. Write the Preferred first-line ART regimen based on the National Programme.
- h. Drugs used in Chronic Gout.
- i. Write the Absolute Contraindications of Hormonal Oral Combined Contraceptive pills.
- j. Obstetric Indications of Prostaglandins.