



Note: Attempt all questions. Answer PART- A and PART -B in separate answer books. All part of a question should be answered together.

**PART - A**

PAPER CODE: 2212130005

(4 + 4 + 3 + 4 = 15)

**Q.1 Long Answer Question**

A 65 years old male presented to the OPD with the complaints of polydipsia and polyuria. His investigation reveals that his HbA1c level is 8%, and FBS was 235 mg/dl. He was diagnosed as a case of type 2 diabetes mellitus.

Address the following:

- Classify the oral anti-diabetic agents.
- Write briefly about mechanism of action, adverse effects and contraindications of Metformin?
- Discuss the life style modifications for this patient.
- Discuss briefly management of Diabetic Ketoacidosis.

**Q.2 Short Notes Questions (within 500 words)**

(5 x 3 = 15)

- Pharmacotherapy of Enteric fever.
- Non-cardiovascular uses of  $\beta$  blockers.
- Write in brief about attributes of good communication by the doctor with his patients.

**Q.3 Short Answer Questions (within 100 words)**

(2 x 5 = 10)

- Angiotensin Converting Enzyme Inhibitors and Spironolactone should not be combined?
- Role of Thrombolytics in acute Myocardial Infarction.
- Amoxicillin is combined with clavulanic acid.
- Aspirin can lead to peptic ulcer.
- Trimethoprim is combined with sulfamethoxazole.

**Q.4 Multiple Choice Questions**

(1 x 10 = 10)

- Thiazide diuretics and Furosemide have directionally opposite effect on the net renal excretion of the following substance:
  - Uric acid
  - Calcium
  - Magnesium
  - Bicarbonate
- Rivaroxaban is?
  - Factor Xa inhibitor
  - Direct Thrombin inhibitor
  - Vit K antagonist
  - Unfractionated Heparin
- Beta blocker not used in heart failure is:
  - Atenolol
  - Carvedilol
  - Metoprolol
  - Bisoprolol
- Digoxin toxicity is increased by :
  - Hyperkalemia
  - Hypokalemia
  - Hypocalcemia
  - Hypermagnesemia
- Mechanism of action of clopidogrel as an antiplatelet agent is :
  - By thromboxane A<sub>2</sub> inhibition
  - Inhibition of ADP mediated cAMP
  - GPIIb/IIIa inhibition
  - By increasing PGI<sub>2</sub> level
- Which of the following drug is a potassium channel opener with anti-anginal activity?
  - Dipyridamole
  - Nicorandil
  - Trimetazidine
  - Oxyphedrine
- Which of the following drugs has been shown to reduce mortality in chronic heart failure patients?
  - Atenolol
  - Digoxin
  - Furosemide
  - Spironolactone
- Which of the following is used in subarachnoid hemorrhage
  - Propranolol
  - Betamethasone
  - Nifedipine.
  - Nimodipine
- Which of the following drugs is absolutely contraindicated in the treatment of hypertension in pregnant patients?
  - Methyldopa
  - Amlodipine
  - Enalapril
  - Hydralazine
- The combination of antianginal drugs that should be avoided to prevent adverse effects is:
  - Verapamil and a  $\beta$  receptor antagonist
  - Nitroglycerine and a  $\beta$  receptor antagonist
  - Nitroglycerine and verapamil
  - Amlodipine and a  $\beta$  receptor antagonist

**Q.1 Long Answer Question**

A 35-year male, working as a senior executive in a multinational company came to the OPD with complaints of episodes of headache, palpitations, and restlessness. His blood pressure was 150/96. He was advised dietary modifications, lifestyle changes, and asked to report after one week with regular monitoring of blood pressure. His blood pressure was still 150/90. He was diagnosed to be a case of Stage I hypertension.

Address the following:

- Classify the drugs used for hypertension
- Briefly write the management of the above-mentioned case of Stage-I hypertension.
- Discuss the role of combination drug therapy in the management of hypertension.

**Q.2 Short Notes Questions**

(within 500 words)

(5 x 3 = 15)

- Treatment of acute iron poisoning
- Management of acute attack of angina
- Anticancer drug induced toxicity and its amelioration.

**Q.3 Short Answer Questions**

(within 100 words)

(2 x 5 = 10)

- Combination chemotherapy in Tuberculosis.
- SGLT2 inhibitors.
- Enumerate adverse effects of corticosteroids.
- Drug treatment of acute gout
- Enumerate adverse effects of thiazide diuretics.

**Q.4 Multiple Choice Questions**

(1 x 10 = 10)

1) Which of the following agents should be given to achieve rapid control of the severe diabetic ketoacidosis?

- Regular Insulin
- Glyburide
- Insulin Glargine
- Tolbutamide

2) Most effective physiological antagonist of histamine in smooth muscle is

- Cetirizine
- Epinephrine
- Ranitidine
- Sumatriptan

3) All of the following drugs are antiemetics, Except:

- Metoclopramide
- Ondansetron
- Domperidone
- Apomorphine Hydrochloride

4) Bisacodyl is

- Bulk forming
- Stool softener
- Stimulant purgative
- Osmotic purgative

5) Sulfa drug used in the treatment of inflammatory bowel disease is

- Sulfasalazine
- Sulfamethoxazole
- Sulphadoxine
- Sulfinpyrazone

6) Heparin acts by binding to

- GP IIb/ IIIa receptor
- Thrombin
- Antithrombin III
- Von Willebrand factor

7) Which of the following is a 5th generation Cephalosporin?

- Cefixime
- Ceftobiprole
- Cefepime
- Cefpirome

8) Which of the following enzyme is inhibited by trimethoprim?

- Folic acid synthase
- Dihydrofolate reductase
- Aldehyde dehydrogenase
- DNA gyrase

9) Most Nephrotoxic anticancer drug is

- Cisplatin
- Bleomycin
- Nitrosoureas
- Vincristine

10) Which of the following antimalarial drug is to be given with dextrose to avoid the risk of hypoglycemia?

- Quinine
- Arteether
- Primaquine
- Chloroquine