



DHH-003-010404 Seat No. _____

M. Sc. (Sem. IV) (CBCS) Examination

May / June - 2015

(COP) - 402 : Chemistry of Synthetic Drugs

Faculty Code : 003

Subject Code : 010404

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- Instructions:**
1. All the questions carry equal Marks.
 2. Attempt five questions in all.

1 Answer any seven of the followings:

14

- a. Define the term PDE₄ inhibitors. Discuss the structure of Sildenafil and Tadalafil.
- b. Define the term Proton pump inhibitors. Discuss synthesis of any one important compounds.
- c. Define the term topical fungal. Discuss synthesis of any one.
- d. Define the term urinary tract infection. Discuss short note briefly on Prostaglandins or Oxytocines.
- e. Define the term Antiglaucoma. Discuss the synthesis of Timolol.
- f. Define and discuss the mechanism of blood clotting shortly.
- g. Define the terms Bacteriostatics and Bacteriocidal.
- h. Define anticancer and discuss the synthesis of Glivec.
- i. Define the terms: Analgesics, Antipyretic and Hypnotics.
- j. Explain the term: Antiarrhythmic. Discuss synthesis of a drug used in cardiac arrhythmic (any one).

2: Answer any three of the followings:

14

- a. Define and classification of Antiulcerative drugs. Discuss the synthesis of Ranitidine and Cimetidine.
- b. Explain the full form of term HIV with definition. Discuss lifecycle of HIV.
- c. Define the term antitubercular drugs. Describe the synthesis of Pyrazinamide, Isoniazide and Cycloserine.
- d. Define the term Hypolipidermic agents. Discuss the synthesis of two fibrates.

3: Answer any two the followings: 14

- a. Define the term Adrenergic and Anti-adrenergics. Discuss synthesis of each two.
- b. Explain Anticonvulsant and discuss the synthesis of Carbamazepine and Lamotrigine.
- c. Explain cardiovascular drugs and discuss the synthesis of any three.

OR

3: Answer any two of the followings: 14

- a. Explain Antidiarrheal drugs and discuss synthesis of any two.
- b. Describe Anti allergic drugs and discuss synthesis of any two.
- c. Discuss Quinolone and Fluoroquinolone antibiotics in detail.

4: Define, Classify and give synthesis of each of two (attempt any Three) 14

1) Sulfa drugs 2) Anesthetics 3) Anticancer agents 4) Tranquilizers 5) Anti viral agents

5: Answer the any Three of following. 14

- a. Define and classify antibiotics and discuss the synthesis of Amoxicillin, Cephalexin, and Cefixime.
- b. Draw a malarial lifecycle and explain in brief. Discuss the synthesis of Pyrimethamine and Mefloquine.
- c. Define and explain Nonsteroidal anti-inflammatory drugs and discuss any two syntheses.
- d. Define and discuss synthesis of Antiprotozoals, Anthelminitics and Anticoagulants citing one each example.