

BACHELOR OF PHARMACY (B. PHARM.) (CBCS-2019 COURSE)

B. Pharm. Sem-V : WINTER- 2022

SUBJECT : MEDICINAL CHEMISTRY-II

Day : Tuesday

Time : 10:00 AM-01:00 PM

Date : 31-01-2023

W-20675-2022

Max. Marks : 75

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer book.

SECTION-I

Q.1 Answer all the questions: (2×10 = 20)

- a) Benzocaine is derivative of. (02)
 - i) Ether
 - ii) Nitro group
 - iii) Bromo group
 - iv) Ester group
- b) Find Odd one out (02)
 - i) Dibucaine
 - ii) Chlorpropamide
 - iii) Glipizide
 - iv) Tolbutamide
- c) Find Odd one out. (02)
 - i) Lignocaine
 - ii) Voglibose
 - iii) Hexylcaine
 - iv) Cyclomethylcaine
- d) Which of the following agents has aziridine moiety? (02)
 - i) Dacarbazine
 - ii) Busulfan
 - iii) Altretamine
 - iv) Thiotepa
- e) H1 antihistamines are (02)
 - i) Inverse agonists
 - ii) Neutral antagonists
 - iii) Agonist
 - iv) Antagonist
- e) Draw Structure, IUPAC and therapeutic uses of Captopril and Phenytoin. (02)
- f) Draw Structure, IUPAC and side effects of Amiloride and Hydrochlorothiazide. (02)
- g) Outline Scheme of synthesis of Mercaptopurine and Chlorthiazide. (02)
- h) Sketch scheme of synthesis for Promethazine and Furosemide. (02)
- i) Sketch scheme of synthesis for Acetazolamide and Warfarin. (02)

Q.2 Attempt any **TWO** of the following: (2×10 = 20)

- a) Write structure and uses of any two amino alkyl ether derivatives as Antihistaminic agents.
- b) Classify diuretics with suitable examples. Discuss chemistry and structural activity relationship of Thiazides.
- c) What are lipid lowering agents? Classify and discuss antihyperlipidemic agents and write about mode of action, chemistry and structural activity relationship.

P. T. O.

SECTION-II

Q.3 Answer any **SEVEN** of the following: ($7 \times 5 = 35$)

- a) Discuss the nomenclature and stereochemistry of steroids with suitable examples.
- b) Outline the synthesis, mechanism of action and uses of testosterone.
- c) Write in brief about drugs used in the treatment of hyperthyroidism.
- d) Discuss about medicinal importance of corticosteroids and give the structure and uses of any two corticosteroids.
- e) Write a note on non-steroidal estrogenic agents.
- f) Describe Sulfonyl ureas as hypoglycemic agents. Outline synthesis of Tolbutamide.
- g) Write SAR of local anesthetics (both ester and amide type).
- h) Write synthesis and uses of Benzocaine and Procaine.
- i) Write note on oral contraceptives.
- j) Write note on drugs used in erectile dysfunction.

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