

T.Y. B.Pharm. Sem-V (C.B.C.S) 2015 Course: SUMMER-2018

SUBJECT : MEDICINAL CHEMISTRY-I

Day : Saturday
Date : 21-04-2018

Time : 10:00AM TO 1:00PM.
Max. Marks : 60

S-2018-3927

N. B. :

- 1) Q. No. 1 and Q. No. 5 are **COMPULSORY**. Out of the remaining attempt any **TWO** questions from each section.
- 2) Answers to both the sections should be written in **SEPARATE** answer books.
- 3) Figures to the **RIGHT** indicate full marks.

SECTION-I

- Q.1** Attempt **ANY FIVE** of the following (10)
- a) Enlist various neurotransmitters with their structures.
 - b) Write IUPAC names, structures and category of i) Physostigmine ii) Ticrynafen.
 - c) Why acetylcholine is poor therapeutic agent.
 - d) Write about structure specific drugs.
 - e) Outline synthesis of for Bethenechol **OR** Hydrochlorthiazide
 - f) Write significance of solubility which affect biological action.
- Q.2** a) Discuss SAR of Cholinergic agents. (07)
b) Write an exhaustive note on potassium sparing diuretics. (03)
- Q.3** a) Classify diuretics based on its chemistry. Explain chemistry of sulfonamides. (07)
b) Explain reversible anticholine-esterases agents. (03)
- Q.4** Write short notes on **ANY TWO** of the following (10)
- a) Mercurials chemistry
 - b) Outline synthetic schemes of Dicylcomine and Furosemide.
 - c) Chemistry of phenoxy acetic acid derivatives.

SECTION II

- Q.5** Attempt **ANY FIVE** of the following (10)
- a) Mention important uses of cardiac glycosides.
 - b) Write IUPAC names, structures and category of i) Lobeline ii) Verapamil
 - c) Write about solanaceous alkaloids.
 - d) Outline synthesis for Mecamylamine **OR** Propranolol
 - e) Write about chemistry of adrenergic neurotransmitters.
 - f) Classify neuromuscular blocker on the basis of mechanism of action.
- Q.6** a) Classify adrenergic agonist. Discuss SAR of direct sympathomimetics. (07)
b) Outline scheme to explain biosynthesis of nor adrenaline. (03)
- Q.7** a) Discuss in detail chemistry and mechanism of action of ACE inhibitors and calcium channel blockers. (07)
b) Write classification of antihypertensive with examples. (03)
- Q.8** Write short notes on **ANY TWO** of the following (10)
- a) Anti-arrythmics
 - b) Cardiotonics.
 - c) Outline synthetic schemes of Chlorzoxazone and Salbutamol.

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