

**T.Y.B.PHARM. SEMESTER-V (2011 Course) : SUMMER - 2019**

**SUBJECT: MEDICINAL CHEMISTRY – I**

Day : Wednesday  
Date : 24/04/2019

**S-2019-4442**

Time : 10.00 A.M. TO 01.00 P.M.  
Max. Marks : 80

**N.B.:**

- 1) **Q.No.1 and Q.No.5 are COMPULSORY.** Out of the remaining questions 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** Give structure, IUPAC and two uses of **Any FIVE** drugs. **(10)**
- i) Neostigmine bromide.
  - ii) Carbachol.
  - iii) Spiranolactone.
  - iv) Caffeine.
  - v) Hydrochlorothiazide.
  - vi) Furosemide.
- Q.2** a) Enlist various physicochemical parameters affecting drug action. Comment on partition coefficient & bioisotermism in drug action. **(10)**  
b) Write a note on acidifying salts. **(05)**
- Q.3** a) Discuss chemistry of cholinergics. Mention about choline esterases enzymes. **(10)**  
b) Classify ganglionic blockers. **(05)**
- Q.4** Write Short Notes on **Any Three** of the following. **(15)**
- a) Theories of anesthesia.
  - b) Solanaceous alkaloids.
  - c) Reversible anticholine esterases.
  - d) Outline synthetic scheme of Mersalyl & Demecarium bromide.

**SECTION – II**

- Q.5** Give structure, IUPAC and two uses of **Any FIVE** drugs. **(10)**
- i) Guanithidine Sulphate.
  - ii) Nitroglycerine.
  - iii) Isoprenaline.
  - iv) Succinyl Choline.
  - v) Captopril.
  - vi) Homatropine.
- Q.6** a) Write in detail about SAR of adrenergic antagonist with biosynthesis of NA through chemical reaction. **(10)**  
b) Discuss chemistry of cardenolides & bufadenolides. **(05)**
- Q.7** a) Classify antiarrhythmics with examples. Explain MOA & chemistry of the agents used in arrhythmia. **(10)**  
b) Write chemistry of ACE inhibitors as antihypertensives. **(05)**
- Q.8** Write Short Notes on **Any Three** of the following. **(15)**
- a) Cardiac Glycosides
  - b) Indirectly acting Sympathomimetics.
  - c) Antianginals.
  - d) Outline scheme of synthesis of Salbutamol & Propranolol.