

FINAL YEAR B.PHARM. SEMESTER-VIII (2011 Course) :

SUMMER - 2019

SUBJECT: MEDICINAL CHEMISTRY - IV

Day : Monday
Date : 22/04/2019

S-2019-4461

Time: 02.00 PM TO 05.00 PM
Max. Marks: 80

N.B.:

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

- Q.1** Solve any **FIVE** questions: (10)
- a) Give any two examples along with one structure of Meperidine analogs.
 - b) Sketch out synthesis of DES.
 - c) What are Androgens?
 - d) Sketch out synthesis of Cimetidine?
 - e) Give applications of prostaglandins.
 - f) What are limitations of QSAR?
- Q.2** What are Narcotic Analgesics? Give the chemistry, classification and side effects of Morphine. Sketch out the synthesis of Methadone. (15)
- Q.3** What are Estrogens? Classify estrogens. Give their chemistry, SAR, MOA and uses. (15)
- Q.4** Write short notes on any **THREE** of the following: (15)
- a) H-1 Antihistaminics
 - b) Drug Design
 - c) Eicosanoids
 - d) Glucocorticoids

SECTION-II

- Q.5** Solve any **FIVE** of the following: (10)
- a) Give two examples of arylpropionic acid derivatives.
 - b) Enlist different insulin preparations.
 - c) Sketch out the synthesis of Tolbutamide.
 - d) Write down any two structures of NSAIDs from Salicylic acid class.
 - e) Give two examples of anticoagulant with their structure.
 - f) Sketch out the synthesis of levothyroxine.
- Q.6** a) Give an account of Thyroid hormone. (08)
b) Explain the SAR of Insulin. (07)
- Q.7** Give classification of NSAIDs along with suitable examples. Discuss SAR and MOA of Aspirin like drugs. Enumerate the synthesis of Paracetamol and Ibuprofen. (15)
- Q.8** Write short notes on any **THREE** of the following: (15)
- a) Heparin and heparinoids
 - b) Oral hypoglycemic agents
 - c) Combinatorial chemistry
 - d) Diagnostic agents used for organ function test