

**Third Year Pharm. D : SUMMER - 2019**

**SUBJECT: PHARMACOLOGY - II**

Day: Monday  
Date: 08/04/2019

Time: 10.00 A.M. TO 01.00 P.M.  
Max. Marks: 70

**S-2019-4511**

**N.B:**

- 1) **Q. No. 1** and **Q. No. 5** are compulsory. Answer **ANY TWO** of the remaining questions from each Section.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answer to the both sections should be written in **SEPARATE** answer book.

**SECTION - I**

- Q.1** A) Answer **ANY FOUR** of the following: **(08)**
- a) Enlist the clinical uses of anticoagulants.
  - b) What are plasma expanders? Give examples.
  - c) Enlist the clinical applications of antidiuretics.
  - d) Classify antiviral drugs.
  - e) Enlist the adverse effect of antidiuretics.
  - f) Enlist the physiological role of folic acid.
- B) What is the mechanism of action of macrolide antibiotics? **(03)**
- Q.2** Classify  $\beta$ -lactam antibiotics. Explain the mechanism of action, spectrum of activity, clinical uses and adverse effects of penicillins. **(12)**
- Q.3** a) Explain the pharmacology of Amphotericin B. **(07)**  
b) Explain the pharmacology of osmotic diuretics. **(05)**
- Q.4** Write short notes on **ANY THREE** of the following: **(12)**
- a) Mechanism of resistance to antibiotics.
  - b) Cotrimoxazole
  - c) Chronic toxicity studies
  - d) Adverse effect of High ceiling diuretics

**SECTION - II**

- Q.5** A) Answer **ANY FOUR** of the following: **(08)**
- a) Enlist the mechanism of action of anthelmintics with example.
  - b) Brief on why combination of drugs are used for treatment of cancer.
  - c) Enlist the cell cycle specific drugs for cancer chemotherapy.
  - d) What is nucleosome?
  - e) Differentiate mRNA and tRNA.
  - f) Why mitochondria are called as Endosymbionts?
- B) Why penicillinase inhibitors are added to penicillins? **(03)**
- Q.6** Classify anticancer drugs. Explain in detail the role of methotrexate in cancer chemotherapy. **(12)**
- Q.7** a) Describe the process of DNA replication in the cell **(07)**  
b) Describe the stages of Meiotic cell division. **(05)**
- Q.8** Write short notes on **ANY THREE** of the following: **(12)**
- a) Transcription and translation
  - b) Key steps in production of Recombinant proteins
  - c) Immunostimulants
  - d) Acyclovir