

**M PHARM**  
**(SEM-I) THEORY EXAMINATION 2019-20**  
**PHARMACOLOGICAL AND TOXICOLOGICAL SCREENING METHODS I**

**Time: 3 Hours****Total Marks: 75****Note: 1.** Attempt all Sections. If require any missing data; then choose suitably.**SECTION A**

- 1. Attempt all questions in brief.**
- 2. Write down about: 10 x 2 = 20**
  - a. IAEC
  - b. Enlist three preclinical screening models of antidiabetics.
  - c. Euthanasia of experimental animals.
  - d. Methods of immunoassay.
  - e. Carrageenan induced paw edema in Albino Wistar rats
  - f. Different strains and species of laboratory animals.
  - g. Enlist two *in-vitro* preclinical screening models of antidepressants.
  - h. Immunomodulators
  - i. Preclinical pharmacological screening models of hepatoprotective drugs
  - j. Anticancer agents.

**SECTION B**

- 2. Attempt any two parts of the following: 2 x 10 = 20**
  - a. Enlist different *in-vitro* and *in-vivo* preclinical screening models of nootropics. Explain any three *in-vivo* screening models.
  - b. What is homogenous and heterogeneous immunoassay system? Discuss various methods and optimization of immunoassay.
  - c. Discuss different preclinical pharmacological screening models for antiulcer agents.

**SECTION C**

- 3. Attempt any five parts of the following: 7 x 5 = 35**
  - a. Write about immunoassay for insulin.
  - b. Describe different *in-vivo* preclinical screening models of anxiety.
  - c. What do you mean by bioassay? Write its principle. Enlist various types of bioassay and their application.
  - d. Write down different *in-vivo* preclinical screening models for antifertility agents.
  - e. Describe different *in-vivo* preclinical screening models of antiatherosclerotic agents.
  - f. Write about different methods of drug administration in laboratory animals.
  - g. Discuss any two *in-vitro* screening methods of epilepsy.