

**M. PHARM**  
**(SEM II) THEORY EXAMINATION 2018-19**  
**SCREENING METHODS & BIOASSAYS**

**Time: 3 Hours****Total Marks: 100****Note: 1.** Attempt all Sections. If require any missing data; then choose suitably.**SECTION A****1. Attempt all questions in brief. 2 x 10= 20**

- a. Discuss the importance of IAEC for animal experimentation.
- b. What do you mean by CTD triangle?
- c. Highlight the advantages of cross breeding.
- d. Comment on intra gastric route of drug administration for rodents.
- e. Define Bio assay and enlist various types of bioassay.
- f. Discuss the importance of bioassay.
- g. Write the objective of ICH S7A guideline.
- h. Write short notes on Morris water maze test.
- i. Enlist various *in-vivo* screening methods for evaluation of antiemetic drugs.
- j. Enlist various *in-vitro* methods for screening of anticancer drugs.

**SECTION B****2. Attempt any three of the following: 10 x 3= 30**

- a. Write a detailed note on ICH guidelines.
- b. Describe various techniques of blood collection in experimental animals.
- c. Explain the validation of new bioassay methods.
- d. Discuss the purpose and rationale of different *in-vivo* models used for the screening of anxiolytic agents.
- e. Explain the screening models for the pharmacological evaluation of Analgesics.

**SECTION C****3. Attempt any one part of the following: 10 x 1= 10**

- a. Discuss the role of USFDA guidelines for animal testing.
- b. Explain the acute toxicity tests for a drug according to OECD guidelines.

**4. Attempt any one part of the following: 10 x 1= 10**

- a. Elaborate breeding methods for experimental animals.
- b. Discuss the significance of genetically prone animal models in drug screening.

**5. Attempt any one part of the following: 10 x 1= 10**

- a. Write a note on statistical treatment of model problems in drug screening.
- b. Elaborate principles of biological assays with suitable examples.

**6. Attempt any one part of the following: 10 x 1= 10**

- a. Explain different *in-vivo* models used for the screening of CNS Stimulants in brief.
- b. Discuss the purpose and rationale of different *in-vivo* models used for the screening of Anti-Parkinson's agents.

**7. Attempt any one part of the following: 10 x 1= 10**

- a. Discuss various *in-vivo* screening methods of anti-ulcer drugs.
- b. Describe various *in-vivo* screening methods of anti-diarrheal drugs.