Printed Pages: 01 **Sub Code: MPL103T**

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M. PHARM.
(SEM I) THEORY EXAMINATION 2018-19
PHARMACOLOGICAL & 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. **10 x 2 = 20**

a. What do you mean by Test item in GLP?

b. Which chemical is required for fusion of karyoplast with the enucleated cell?

c. What is the role of Isoguvacine or muscimol in [^{3}H]-GABA receptor binding assay for screening of GABAergic Compounds?

d. Name the behavioral test used for assessing spatial learning.

e. Which cell line is used for *in-vitro* NO release test (aphrodisiac activity)?

f. Write down the principle of Konzett-Rossler method.

g. Why aconitine used in preclinical screening of anti-arrhythmic agents? Write its mechanism of action.

h. Enlist various models used for drug screening of non-insulin-dependent diabetes.

i. Differentiate heterogeneous and homogenous immunoassay systems.

j. What do you mean by micro-dosing studies?

SECTION B

2. Attempt any *two* parts of the following: **2 x 10 = 20**

a. Discuss CPCSEA guidelines to conduct experiments on animals.

b. Explain any two *in-vitro* methods for the preclinical screening of anti-epileptics.

c. Discuss possible animal alternative models for preclinical screening of immunomodulators.

SECTION C

3. Attempt any *five* parts of the following: **7 x 5 = 35**

a. What are the main requirements of GLP (Good Laboratory Practice)?

b. Discuss different methods used for the screening of sympathomimetic drugs.

c. Explain any two *in-vivo* methods for the preclinical screening of anti-emetics.

d. Write a note on *in-vivo* methods for the screening of anti-inflammatory agents.

e. Illustrate any two methods for the preclinical screening of antiatherosclerotic agents in detail.

f. Name any five *in-vivo* models used for the screening of hepatoprotective agents. Explain any one in detail.

g. Describe immunoassay for digoxin in detail.