



AJEENKYA

D Y PATIL UNIVERSITY

End Term Examination (December 2019)

School: SOM

Program: MSC CLINICAL RESEARCH

Course: PRE-CLINICAL EVALUATION
OF DRUGS

Course Code: MGT685

Semester: 3rd

Max Marks: 50

Duration (mins): 150 mins

Instructions to the students

- 1) *The Question paper consists of two sections- Section I and Section II.*
- 2) *All questions are compulsory.*
- 3) *Neat flow charts or diagrams must be drawn wherever necessary*
- 4) *Figures on the right indicate full marks*

SECTION 1

Q 1) Answer the following:

[2x5=10]

- a) Explain hypnotics. Give examples of any 2 hypnotics.
- b) Describe in brief HT screening.
- c) Differentiate between anxiolytic and anxiogenic agents.
- d) What are the after-effects of CNS stimulants?
- e) Define bronchodilators. What are the various types of bronchodilators?

Q 2) Attempt any two of the following:

[5x2=10]

- a) Describe DNA microinjection method with a neat labeled diagram. Also give the importance of transgenic animals.
- b) Explain with the help of a flow chart animal cell culture.
- c) What is rabies? Give the structure of lyssavirus. Explain the various steps involved in the process of rabies virus infection in a human body.

d) What is patch clamp technique? Give the principle involved in the technique. Also describe the various types of patch clamp configurations.

Q 3) Attempt any one of the following:

[5x1=5]

- a) Define plague. What are its different types? Describe the various drugs involved in the treatment of plague.
- b) Explain in detail – Immunoassay.

SECTION 2

Q 1) Answer the following:

[2x5=10]

- a) What are ED50 and LD50?
- b) What is Developmental Toxicity? What are the agents that affect reproductive system in humans?
- c) Explain single-dose and repeated dose studies
- d) **Explain the 3R's of animal testing**
- e) What are the risks that are associated with IVF?

Q 2) Attempt any two of the following:

[5x2=10]

- a) Explain the various stages in chemical carcinogenesis?
- b) Describe in detail Hypersensitivity with diagram.
- c) Elaborate the topic- FDA.
- d) Explain cell culture and tissue engineering for skin corrosion and skin irritation as an alternative to animal testing.

Q 3) Attempt any one of the following:

[5x1=5]

- a) Explain in detail about CPSEA.
- b) What is the principal involved in Ames test .Describe the Plate incorporation method with the help of a neat and labeled diagram.

*****ALL THE BEST*****