

(LF 125)

OCTOBER 2014

Sub. Code:2022

**M.D. DEGREE EXAMINATION
BRANCH VI - PHARMACOLOGY**

**PAPER I - GENERAL PHARMACOLOGY, EXPERIMENTAL
PHARMACOLOGY AND BIOASSAY**

Q.P.Code: 202022

Time: Three Hours

Maximum: 100 marks

I. Essay:

(2 x 10 = 20)

1. Discuss the process of new drug development and its approval.
2. Give a detailed account of the screening methods for evaluating an analgesic agent.

II. Short Questions:

(8 x 5 = 40)

1. Spectrophotometer and its uses.
2. Transgenic animals.
3. Evidences for Neurohumoral transmission.
4. Plasma protein binding of drugs.
5. Pharmacovigilance.
6. Cytoplasmic second messengers.
7. Tyrosine kinase inhibitors.
8. Matching bioassay method.

III. Reasoning Out:

(4 x 5 = 20)

1. Importance of sample size calculation in clinical trials
2. Preclinical testing of a drug.
3. Transdermal therapeutic systems.
4. Sustained release formulations.

IV. Very Short Answers:

(10 x 2 = 20)

1. Ehrlich and Langley.
2. Ceiling effect in a Dose Response curve.
3. Define precision.
4. Students 't' test.
5. Chirality.
6. Spare receptors.
7. First order kinetics
8. List four drugs that attain high concentration in bile.
9. Define C max.
10. Inverse agonist.
