

**VINAYAKA MISSION'S RESEARCH FOUNDATION
(DEEMED TO BE UNIVERSITY), SALEM**

M.D. DEGREE EXAMINATION - May 2019

PHARMACOLOGY

**PAPER II : DRUG DEVELOPMENT (EXPERIMENTAL
PHARMACOLOGY AND CLINICAL TRIALS)**

Time: Three hours

Maximum: 100 marks

Answer ALL questions

SECTION - A

I. Essay: (1 x 20 = 20)

1. Discuss the various experimental methods to evaluate anti-fertility drugs.

II. Write short notes on: (5 x 6 = 30)

2. Transgenic animals
3. General principles of bio assay
4. Various general anaesthetics used in animal experiments.
5. Cell culture techniques
6. Ethical consideration of animal use in Indian Scenario.

SECTION - B

I. Essay: (1 x 20 = 20)

7. Discuss the various techniques used and the clinical applications of gene therapy.

II. Write short notes on: (5 x 6 = 30)

8. Microdose
9. Role of biotechnology in therapeutics
10. PCR
11. Therapeutic drug monitoring
12. Acute toxicity studies.