

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER-8 EXAMINATION – WINTER -2023

Subject Code: BP810TT**Date: 06/12/2023****Subject Name: Experimental Pharmacology****Time:02.30 p.m. to 5.30 p.m.****Total Marks: 80****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1. (a)** Explain the following in brief (any three): **06**
1. Randomisation 2. Positive and Negative Control 3. Euthanasia 4. Crossover
- (b)** Discuss the sources for review of literature. **05**
- (c)** Discuss the use of one way ANOVA in preclinical research. **05**
- Q.2. (a)** Enlist animals used for Preclinical experiments. Discuss the use of Rabbits in experimental Pharmacology. **06**
- (b)** Discuss the use of transgenic animals in Preclinical Research. **05**
- (c)** Enlist the sites for blood collection and IV injection for following animals: **05**
1. Rat 2. Mice 3. Rabbit 4. Guinea Pig 5. Dog
- Q.3. (a)** Classify the methods used for evaluation of Anti-inflammatory agents. Discuss Carageenan induced paw edema model in brief. **06**
- (b)** Enumerate models used for screening of Antiulcer drugs. Describe the Pylorus Ligation model in brief. **05**
- (c)** Outline the models used for screening of antipsychotics. Write in brief about Condition Avoidance test. **05**
- Q.4. (a)** Explain the use of following in Preclinical screening: (any three) **06**
1. Leptazole 2. Streptozotocin 3. Aspirin 4. Rotenone 5. Fructose
- (b)** Enlist the models used for Antiparkinson activity. Discuss in detail the Rotenone model. **05**
- (c)** Discuss in brief the models used for evaluation of drugs used in Glaucoma. **05**
- Q.5. (a)** Enumerate models used for screening of Sympatholytics. Discuss any one in vitro model. **06**
- (b)** Discuss the models used for evaluation of skeletal muscle relaxants. **05**
- (c)** Enumerate the models used for evaluation of Local Anesthetics. Discuss assessment of surface anesthesia. **05**
- Q.6. (a)** Enumerate preclinical models of hypertension. Discuss the surgical models in brief. **06**
- (b)** Discuss in detail the Lipschitz model for evaluation of diuretics. **05**
- (c)** Enumerate models used for screening of Antiasthmatics. Discuss any one method for evaluation of Bronchodilators. **05**
- Q.7. (a)** Explain the use of following in Preclinical screening: (any two) **06**
1. Porsolt's apparatus 2. Elevated Plus Maze 3. Rotarod
- (b)** List out preclinical models for type I and type II Diabetes. Discuss the role of Alloxan in diabetes research. **05**
- (c)** Enumerate the models used for inducing dyslipidemia. Discuss the use of Triton/Poloxamer in hyperlipidemia research. **05**
