

**PARUL UNIVERSITY**  
**FACULTY OF PHARMACY**

**M.Pharm. Supplementary Examination November - 2017**

**Year: 1****Date: 10-11-2017****Subject Code: 08204103****Time: 10.00 am to 01.00 pm****Subject Name: Pharmacometrics and Methods of Biological Evaluation of Drugs****Total Marks: 75**

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**Instructions:**

1. Figures to the right indicate maximum marks.
2. Make suitable assumptions wherever necessary.

**Q.1 Essay Type Questions. (any 2 out of 3) (15 Mark Each) (30)**

1. Write about OECD guidelines for acute toxicity. Enumerate animal toxicity studies and write about the methods of testing for carcinogenicity of drugs.
2. Explain the different parameters used for evaluation of Antihypertension agent. Enlist various models for evaluation of drugs used in hypertension and describe any two of them in details. Discuss limitations for evaluation of antihypertensive agents in animals.
3. Write a note on diabetes marker. Enlist various models for evaluation of drugs used in Type 2 diabetes mellitus. Describe any two of them in details.

**Q.2 Short Essay Type Questions. (any 5 out of 6) (5 Mark Each) (25)**

1. Explain the scope and limitation of bioassay.
2. Define pyrogen toxicity. Write about the sources of such kind of toxicity and official method of evaluation for the same.
3. Enumerate the methods used for screening of anti-inflammatory agents. Discuss in detail on carageen induced acute hind paw oedema method in rat.
4. Write a note on liver function tests. Write on any two screening methods for hepatoprotective evaluation.
5. Discuss chemical and electrical methods of inducing arrhythmias.
6. Write a short note on – Models for Hyperlipidaemia.

**Q.3 Short Answers. (2 Mark Each) (20)**

1. Discuss any one method for insulin bioassay.
2. Define LD<sub>50</sub> and ED<sub>50</sub>
3. Discuss the principle and use of Cook's pole climbing apparatus.
4. Write a note on Analgesiometer.
5. Define transgenic animal and teratogenicity.
6. Enumerate different techniques for microbiological assays of antibiotics.
7. Write a note on rotarod apparatus.
8. What are difference between maximum electro shock seizure and chemically induced convulsion models for anti epileptic activity?
9. Explain principles of Bioassay.
10. Enumerate various methods for evaluation of drugs used in peptic ulcer disease.