

GUJARAT TECHNOLOGICAL UNIVERSITY
M. PHARM. - SEMESTER – II • EXAMINATION – WINTER 2012

Subject code: 2920103**Date: 10-01-2013****Subject Name: Pharmacometrics and Methods of biological evaluation of drugs****Time: 10.30 am - 01.30 pm****Total Marks: 80****Instructions:**

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

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| Q.1 | (a) Explain the scope and limitations of bioassay. Describe the different methods for the bioassay of insulin | 06 |
| | (b) Describe the different animal models for the evaluation of anti-diabetic agents. | 05 |
| | (c) Answer the Following: 1. LAL test 2. Rabbit's head drop method | 05 |
| Q.2 | (a) Enumerate the different methods for the evaluation of analgesics. Discuss any two methods of them in detail. | 06 |
| | (b) Explain the LIPSCHITZ Test for the evaluation of diuretics. | 05 |
| | (c) Write note on experimental models for the evaluation of bronchodilators. | 05 |
| Q.3 | (a) Discuss the different in-vivo and in-vitro models for the evaluation of parasympathomimetics. | 06 |
| | (b) Discuss OECD guidelines for the chronic toxicity study. | 05 |
| | (c) Enumerate the different animal models for the evaluation of anti-hypertensive agents and explain DOCA salt induced hypertension in rats. | 05 |
| Q.4 | (a) Describe the following agents in light of screening:
1. Strophanthin 3. Triton
2. Cysteamine | 06 |
| | (b) Enlist the different methods for the assessment of glucocorticoid activity and describe any two of them in brief. | 05 |
| | (c) Describe the different In-vitro methods of testing for the genotoxicity of drugs. | 05 |
| Q.5 | (a) Discuss the animal models for the chemical induced convulsion. | 06 |
| | (b) Enumerate the different animal models for the evaluation of anti-ulcer agents and discuss pylorus-ligation method in detail. | 05 |
| | (c) Describe working and application of rota rod's apparatus. | 05 |
| Q. 6 | (a) Explain any two models for the evaluation of anti-parkinsonian drugs. | 06 |
| | (b) Write a note on naphthalene induced cataract in rats. | 05 |
| | (c) Describe agar plate method for the microbiological assay of anti-biotics. | 05 |
| Q.7 | (a) Describe the different animal models for the evaluation of anxiolytic activity. | 06 |
| | (b) Discuss the various methods for the assessment of estrogen activity. | 05 |
| | (c) Discuss the different animal models for the evaluation of anti-depressant drugs | 05 |
