Seat No.:	Enrolment No.
	CHIADAT TECHNOLOGICAL UNIVERSITY

M. Pharm - SEMESTER-II. EXAMINATION - SUMMER-2016 Subject Code: 2920103 Date: 19/05/2016 Subject Name: Pharmacometrics and Methods of Biological Evaluation of Drugs Time: 10:30 PM to 1:30 PM **Total Marks: 80 Instructions:** 1. Attempt any five questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. Describe and explain "standard battery of genotoxicity tests" as per ICH **Q.1 06** guidelines. Define biological standardization and discuss briefly different methods for **(b) 05** bioassay of insulin. Write a short note on pyrogen testing. 05 (c) **Q.2** Enumerate models for evaluation of sympathomimetics and discuss any two (a) 06 models in brief. Classify in-vitro and in-vivo models for evaluation of parasympatholytic drugs **(b)** 05 and discuss any one in detail. Describe any two methods for evaluation of non-depolarizing skeletal muscle 05 (c) relaxants. **Q.3** (a) Enumerate various models for evaluation of local anaesthetics. Explain any two 06 models in brief. Discuss the application of potentiation of hexobarbital sleeping time. 05 **(b)** Enlist various methods for evaluation of antiepileptics. Describe any one 05 method based on electroshock seizures. **Q.4** Enumerate various in-vitro and in-vivo models for evaluation of anxiolytics. (a) 06 Explain in brief "Vogel's unconditioned conflict test" and "light dark chamber model". Enlist various methods for screening of anti-inflammatory agents. Write in brief **(b)** 05 about carrageenan-induced paw edema model. Enumerate various models for screening of antiparkinsonian drugs. Explain any 05 (c) one model in detail. How primary screening of anti-atherosclerotic drugs is carried out? Write the **Q.5** (a) 06 rationale of hypersholesterolemic animals in screening. **(b)** Write down any two screening methods for anti-anginal drugs. 05 (c) Explain lagendorff's heart preparation and its application in cardiovascular 05 drug evaluation. Enumerate various methods for evaluation of drugs used in peptic ulcer. **Q.** 6 (a) 06 Describe pylorus ligation in brief. Write in brief *in-vivo* methods for evaluation of anti-asthmatics. 05 **(b)** Enlist various models for evaluation of drugs used in diabetes mellitus. 05

Describe any one of them in brief. Enlist methods for evaluation of antifertility agents for the male and female. **Q.7** (a) 06 Describe estrogenic receptor binding assay and dextran coated charcoal adsorption techniques in detail. Describe surgically induced experimental models of glaucoma. **(b)** 05 Write the rationale, experimental design and evaluation of N-methyl, N-05 Nitrosourea induced cataract and 2,4,6- trinitrobenzene sulphonic acid induced

colitis in rats.