Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY M. Pharm – SEMESTER III • EXAMINATION – WINTER-2016

Subject Code: 930001 Date: 21/11/2016

Subject Name: Experimental Design and Patents

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.

Q.1	(a) (b) (c)	Distinguish between full factorial design and fractional factorial design. What are contour plots? Explain the important aspects of contour plots. State the advantages and disadvantages of Placket Burman design as compared to other optimization designs.	06 05 05
Q.2	(a)	Write a brief note on Box- Behnken design.	06
	(b)	Draw a flow chart for the prosecution of patent application.	05
	(c)	Discuss the importance of experimental design in clinical trials?	05
Q.3	(a)	Discuss the method of Yates to construct factorial ANOVA table.	06
	(b)	Write a note on: Cross over design.	05
	(c)	Write a note on various software used in experimental design.	05
Q.4	(a)	Write a short note on Pharmacoinformatics.	06
	(b)	Discuss in detail two factors two level factorial design giving suitable	05
	(a)	example. State the forms required to be submitted along with a notant application	05
	(c)	State the forms required to be submitted along with a patent application.	05
Q.5	(a)	Explain the following terms as per 'The Indian Patents Act, 1970': Assignee, Exclusive License, Priority Date and Medicine.	06
	(b)	Write a detailed note on: Patent Search.	05
	(c)	Discuss in detail the key elements in creating a laboratory notebook.	05
Q. 6	(a)	Which are the different types of infringement? Differentiate between direct and indirect infringement.	06
	(b)	Explain prima facie obviousness in detail giving suitable examples.	05
	(c)	Write a note on three basic requirements for patentability.	05
Q.7	(a)	Enumerate different parts of a patent and explain claims in detail.	06
	(b)	Discuss in detail trademark protection.	05
	(c)	What is the difference between process and product patent?	05
