Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

M. Pharm. - SEMESTER-III • EXAMINATION - SUMMER 2016 Date: 25/05/2016

Subject Code: 930001

Subject Name: Experimental Design and Patents

Time: 2:30 pm - 05:30 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)	Define following as per Indian Patent Act 1970 i) Inventive step ii) Exclusive License iii) Medicine	06		
	(b) (c)	Enumerate at least 10 non patentable subject matters. Describe compulsory licensing.	05 05		
Q.2	(a)	Prepare mathematical model for compatibility testing of 5 excipie at 2 levels taking response at two degradation conditions.	ents 06		
	(b) (c)	Write a detailed note on central composite design. Describe significance of contour plots giving an example.	05 05		
Q.3	(a) (b) (c)	Discuss the relevant provisions for opposition to grant of patent. How are claims drafted, illustrate with an example. Write a note on patent search.	06 05 05		
Q.4	(a)	What are intellectual property rights, how they are significant for society and nation?	the 06		
	(b)	Write an elaborative note on copy right.	05		
	(c)	Elaborate on grounds for refusal of registration of trade mark.	05		
Q.5	(a)	Describe response surface methodology.	06		
V.	(b)	Differentiate between one way and two way ANOVA.	05		
	(c)	Explain Plackett-Burman design.	05		
Q. 6	(a)	Discuss different types of patent infringements.	06		
V. 0	(b)	Describe PCT application. 0			
	(c)	Discuss in brief Forms and Formats of Patent application and grad			
	(-)	process.			
Q.7	(a)	Explain the terms Factors, Levels and Effects.	06		
-	(b)	Calculate the main effect and interaction by Yates method for the	05		
	data given below (based on two replications)-				
		Treatment 1 A B AB C AC BC AE	C		
		Yield 135 65 60 95 110 95 115 100)		

(c) Write brief note on cross over design. 05