

Seat No.: _____

Enrolment No. _____

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

Subject code: 930001**Date: 21/11/2012****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.

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|-------------|--|-----------|
| Q.1 | (a) Explain terms. i) Factors ii) Levels iii) Effects | 06 |
| | (b) Write advantages of factorial design. | 05 |
| | (c) Write short note on “ fractional factorial design”. | 05 |
| Q.2 | (a) Write advantages and applications of central composite design. | 06 |
| | (b) Write short note on ‘ Response surface method’. | 05 |
| | (c) Differentiate one way ANOVA and two way ANOVA. | 05 |
| Q.3 | (a) Explain Yate`s method of calculating main effects and interaction in a 2 ³ factorial experiments. | 06 |
| | (b) Explain Plackett- Burman experimental design. | 05 |
| | (c) Classify factorial design and explain Box- Benhken design. | 05 |
| Q.4 | (a) What are the benefits of the patent system? | 06 |
| | (b) What are the inventions for which patents can be secured? | 05 |
| | (c) Discuss about non- patentable inventions. | 05 |
| Q.5 | (a) What are the different types of patents, which can be secured under the Indian Patent Act? | 06 |
| | (b) Write detail about the general format, which is to be adopted for preparing the specification. | 05 |
| | (c) What are the advantages of filing a provisional specification? | 05 |
| Q. 6 | (a) What are the different types of claims generally found in a complete specification? | 06 |
| | (b) What are the documents required for filing an application for patent in India? | 05 |
| | (c) Write a short note on “ Laboratory Notebook”. | 05 |
| Q.7 | (a) What is infringement? Explain in detail different types of infringement. | 06 |
| | (b) Write salient features of the patent Rules 2003. | 05 |
| | (c) Give an overview of websites that provide information on patent. | 05 |
