

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.

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| Q.1 | (a) Distinguish between full factorial design and fractional factorial design. | 06 |
| | (b) What are contour plots? Explain the important aspects of contour plots. | 05 |
| | (c) State the advantages and disadvantages of Plackett Burman design as compared to other optimization designs. | 05 |
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| 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 |
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| 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 |
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| Q.4 | (a) Write a short note on Pharmacoinformatics. | 06 |
| | (b) Discuss in detail two factors two level factorial design giving suitable example. | 05 |
| | (c) State the forms required to be submitted along with a patent application. | 05 |
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| 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 |
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| 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 |
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| 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 |
