HV-02011242   Seat No. _____

M. Pharm. (Sem. III) (CBCS) Examination

June / July – 2017

Patent, Design of Experiment & Biostatistics

(Interdisciplinary : Paper - VI)

Time : **3 Hours**]   [Total Marks : **80**

Instructions : (1)   Answer and tie up both the sections separately.

(2)   Figures to the right indicates marks.

(3)   Answer any three (03) questions from each section.

(4)   Question one (1) and questions five (5) are compulsory.

(5)   Draw neat and clean diagrams as required.

SECTION – I

1   Answer any **seven** questions out of eight :   **7×2=14**

(1)   What is the prior art?

(2)   What is patent infringement? Who has to take care of patent infringement?

(3)   What is the preamble of GATT?

(4)   Differentiate product patent and process patent.

(5)   Briefly describe: impact of product patent in India.

(6)   Explain the term: TRIPS

(7)   Enlist different types of intellectual properties with example.

(8)   Define: statistics

2   Answer the following :

(a)   Describe the role of Paris convention.   **7**

(b)   Write a note on WIPO.   **6**

3   Answer the following :

(a)   Distinguish between US patent system V/S EU patent   **7**
system.

(b) Describe in detail parts of patent applications with their importance. **6**

4 Answer the following :
(a) Explain the guideline for patent application relating to pharmaceutical invention. **7**
(b) Write a note on: Patent Cooperation Treaty and explain its functions. **6**

SECTION – II

5 Answer Any **TWO** (2) questions from the following : **2×7=14**
(1) What is Null hypothesis? Explain its importance.
(2) What is regression analysis? How it is useful in pharmaceutical research?
(3) What are the pros and cons of factorial design?

6 Answer the following :
(a) Write a short note on: Response surface methodology. **7**
(b) Explain terms : **6**
   (i) Factors
   (ii) Levels
   (iii) Effects

7 Answer the following :
(a) Classify factorial design and explain Box- Benhken design.
(b) Write short note on "fractional factorial design".

8 Answer the following :
(a) Write a short note on: ANOVA **6**
(b) Write a short note on: t - Test & Chi-square **7**

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