



HV-M2011123

Seat No. _____

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

June/July – 2017

Global Regulatory Requirements

Time : **3** Hours]

[Total Marks : **80**

- Instructions :** (1) Answer and tie both the sections separately.
(2) Figures to the right indicates marks.
(3) Answer any 3 questions from each section including Que. 1 & Que. 5 are compulsory.

SECTION – I

1 Answer any **SEVEN** out of given **TEN** questions : **7×2=14**

- (a) Give full form of :
(i) CDRH
(ii) ERP
(iii) QbD
(iv) MCA
- (b) What do you mean by reference listed drug?
- (c) What do you mean by Generic drug?
- (d) Give difference between DMF and Applications.
- (e) Define : Therapeutic Equivalent and Pharmaceutical Equivalent.
- (f) What do you mean by Hatchwaxman ammendments?
- (g) Discuss different plans of USFDA.
- (h) What USFDA does and does not regulate?
- (i) Enlist the different sections of NDA.
- (j) What is the role of ICH in improving pharmaceutical product quality?

2 Answer the following :

- (a) Define Pharmaceutical validation? Give its types **7**
and discuss its scope in Pharmaceutical industry.
- (b) Define IND. Enlist the category of IND application. **6**

- 3** Answer the following :
- (a) What are Orange Book, Green Book and Blue Book? **7**
 Discuss the coding system for Therapeutic Equivalence Evaluation and how it can be changed giving suitable illustration?
- (b) Define CTD and e-CTD. What are technical requirements for e-CTD ? **6**

- 4** Answer the following :
- (a) Discuss SUPAC guidelines for modified release dosage forms. **7**
- (b) Write a note on validation of Dissolution Apparatus. **6**

SECTION – II

- 5** Answer any **TWO** out of given **THREE** questions : **2×7=14**
- (a) What are clinical trials? How are they organized as the part of drug discovery process?
- (b) Explain the concept of ANDA and prepare the flow chart showing ANDA review process.
- (c) Write a brief account on IIG.

- 6** Answer the following :
- (a) What are DMFs? Enumerate the various types of DMFs and explain in detail type II DMFs. **7**
- (b) Discuss Structure and functions of USFDA. **6**

- 7** Answer the following :
- (a) Write a note on ANVISA OR TGA **7**
- (b) What is MHRA? Write down the function of MHRA. **6**

- 8** Answer the following :
- (a) Discuss the WHO certification scheme for pharmaceutical products. OR Give details about Equipment Qualification for Rapid Mixer Granulator. **7**
- (b) Write a note on computer system validation. **6**