

**M. PHARM. SEM-I (CHOICE BASED CREDIT & GRADE
SYSTEM) : WINTER - 2018**

SUBJECT: ADVANCED PHARMACEUTICS – I

Day : Monday
Date : 07/01/2019

W-2018-4154

Time : 10.00 A.M. TO 01.00 P.M.
Max. Marks: 60

N.B.

- 1) Answer any **THREE** questions from **Section – I** any **THREE** questions from **Section – II**.
 - 2) Both the sections should be written in separate answer books.
 - 3) Figures to the right indicate **FULL** marks.
-

SECTION - I

- Q.1** Enlist the various parameters to be considered during preformulation study. Comment on the interrelationship of drug properties in preformulation. (10)
- Q.2** Explain the model based and model independent approaches to compare dissolution profile. (10)
- Q.3** Enlist the various approaches employed for optimization of pharmaceutical formulations. (10)
- Q.4** Write short notes on: (10)
- a) Principle, Instrumentation and application of DSC.
 - b) Q.1 ICH guideline for stability study of pharmaceuticals.

SECTION – II

- Q.5** Give an account of the different mathematical approaches to study the compressional behavior of solids. (10)
- Q.6** Define CMC. Elaborate on the factors affecting CMC. (10)
- Q.7** Explain the different mechanisms of biodegradation of polymers with examples. (10)
- Q.8** Write notes on : (10)
- a) Thermodynamics of polymer solutions
 - b) Dendrimers

* * * * *