

Pre. Ph.D. Course Work (2017 Course) : (Pharmaceutics) :
SUMMER - 2019
SUBJECT : PAPER – II RECENT ADVANCES IN PHARMACEUTICS

Day : Wednesday
Date : 24/04/2019

Time : 10.00 AM TO 1.00 PM
Max. Marks : 100

S-2019-5353

N.B.:

- 1) Attempt **ANY FIVE** from Section – **I** and **ANY FIVE** from Section - **II**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Both the sections should be written in **SEPARATE** answer books.
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SECTION – I

- Q.1** Give an account on Q.5 ICH guidelines in respect to the stability of biotechnological products. (10)
- Q.2** Describe various approaches for designing of controlled release injectables. (10)
- Q.3** Explain the mechanism of formation of bilayer vesicles. Comment on the stability of liposomes. (10)
- Q.4** Describe preparation and evaluation of polymeric NPs. (10)
- Q.5** Explain with an example the use of full factorial and partial factorial design in the formulation optimization. (10)
- Q.6** Write notes on : (10)
- a) Multiple emulsion
 - b) NLC

SECTION – II

- Q.7** Elaborate on the various challenges in protein and peptide drug delivery. (10)
- Q.8** Give an account of active drug targeting used for anti-cancer drugs. (10)
- Q.9** Give an account on acute and sub-acute toxicity testing as per OECD guidelines. (10)
- Q.10** Describe the approaches for mucosal delivery of vaccines. (10)
- Q.11** Explain the components and design of dry powder inhalers. (10)
- Q.12** Write notes on : (10)
- a) In vitro evaluation of drug absorption
 - b) Approaches for colon targeting

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