

(LQ 4267)

FEBRUARY 2020

Sub. Code: 4267

**B.PHARM. DEGREE EXAMINATION**  
**FOURTH YEAR**  
**PAPER I – FORMULATIVE PHARMACY AND BIO-PHARMACEUTICS**

*Q.P. Code: 564267*

**Time: Three hours****Maximum: 100 Marks****I. Elaborate on:****(2 x 20 = 40)**

1. Define Bio-pharmaceutics. Discuss various factors influencing drug absorption in biological milieu.
2. Explain chemical properties influence stability of pharmaceutical formulation. Discuss stability testing protocol followed for biological products.

**II. Write notes on:****(8 x 5 = 40)**

1. Quality control of hard gelatin capsules.
2. Process followed for bio-equivalency testing.
3. Different types of granulation techniques adopted in tablet manufacturing.
4. Sugar coating process.
5. Nanoparticles.
6. Processing problems of tablets and its rectification.
7. Biological half-life and Elimination rate constant.
8. Multi-orifice centrifugation method used in microencapsulation.

**III. Short answers on:****(10 x 2 = 20)**

1. Bio availability.
2. Phase separation.
3. Bridging and filling.
4. Different types of dissolution apparatus.
5. Compartment models.
6. Diffusion mechanism.
7. Liposomes.
8. Rat hole formation.
9. Process variables of film coating.
10. Osmosis.

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