22/04/2021

Total No. of printed pages = 2

PY 132709E2

Roll No. of candidate | | | | | | | | | | |

2021

B.Pharm. 7th Semester (Repeater) Examination

***Elective* -2 — ADVANCED PHARMACEUTICS**

(Old Regulation)

Full Marks – 100 Time – Three hours

The figures in the margin indicate full marks for the questions.

Answer question No. 1 and any *six* from the rest.

1. Answer the following questions : (10 × 1 = 10)
   (a) What do you mean by Novel Drug Delivery?
   (b) Differentiate co-polymers and homopolymers.
   (c) What do you mean by bioadhesive polymer? Give examples.
   (d) Differentiate co-polymers and homopolymers.
   (e) Define dendrimers.
   (f) What are the three useful mechanisms of zero order drug release rate?
   (g) Name one each of the commonly used component in micro emulsion.
   (h) Name the water insoluble coating materials used for micro emulsion.
   (i) What is lacrisert?
   (j) What is Franz diffusion assembly?

2. Define polymer. Classify them with suitable examples. Discuss two hydrophilic cellulose derivatives used as drug carrier in NDDS. Discuss the advantages of hydrophilic polymer used in drug delivery system. (1+3+8+3)

3. What do you mean by complexing polymer? Briefly explain the formation and characterization of micro emulsion? (5+10)

4. Discuss the method of preparation, characterization and application of nanoparticles in drug delivery systems. (5+6+4)

[Turn over

5. What is micro emulsion? Explain the four types of micro emulsion with phase diagram. How is micro emulsion different from nanoemulsion? What is the theory of micro emulsion formation? Explain different process of characterization of micro emulsion. (1+4+3+3+4)

6. Discuss the advantages and disadvantages of controlled release formulation. Write down different level of correlation in in-vitro and in-vivo correlation for CDDS. (3+3+9)

7. What are the regulatory aspects and specifications used in packaging of pharmaceutical products? Give details of glass as the packaging material. (8+7)

8. Discuss different types of material used in the formulation of osmotic pump with suitable examples. Write short notes on elementary osmotic pump. (10+5)