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PY 134202

Roll No. of candidate

2017

M. Pharm 2nd Semester End-Term Examination

NOVEL DRUG DELIVERY SYSTEMS

Full Marks–100 Pass Marks–35 Time–Three hours

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

Answer any *five* questions.

1. (a) Enlist parameters to be considered in the design of controlled drug delivery system. Discuss various approaches for oral delayed release drug delivery system. 3+3=6

   (b) Describe application of nanoparticle drug delivery system. 5

   (c) Which categories of drug are suitable for GRDDS and why ? Explain expandable approach for GRDDS. 4+5=9

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2. (a) Enlist patented techniques of osmotic drug delivery system. Explain Higuchi -Theeuwes Pump. 4+3=7

(b) What are the objectives of oral transmucosal drug delivery system ? Discuss evaluation parameters of oral transmucosal drug delivery system. 3+5=8

(c) Name at least four different methods used in determination of particle size in nanoparticles. Define Niosomes. 2+3=5

3. (a) Discuss the enzymatic barrier for delivery of P and P Drug. 4

(b) Enumerate various concepts for drug targeting. Discuss with example passive, reverse and active targeting. 4+6=10

(c) Discuss factors affecting on drug release from osmotic drug delivery system. 6

4. (a) Discuss briefly different controlled release approaches of parenteral drug delivery. 10

(b) Discuss various approaches of floating drug delivery system. 6

(c) Discuss the method of drug content and folding endurance test of TDDS. 4

5. (a) Discuss different application of nanoemulsion. 6

(b) Discuss non covalent instability of protein and peptide drug. 7

(c) Write the mathematical model for diffusion controlled drug delivery system. 7

6. (a) Write the recent development of intrauterine drug delivery system. 10

(b) Enlist various methods used for bioadhesive property measurement. Discuss any one. 10

7. (a) Classify types of Liposomes based on composition. Explain mechanism of liposome preparation. 10

(b) Describe recent advances in semi solid dosage form. Explain hydrogel. 10