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SARDAR PATEL UNIVERSITY

SEMESTER EXAM, M.Sc. INDUSTRIAL CHEMISTRY

SEMESTER -3, PS03CICH09-PHARMACEUTICAL TECHNOLOGY

27-10-2016, Thursday, TIME: 02:00 p.m to 5:00 p.m

Total Marks: 70

Note: Attempt all questions. Draw neat and labeled diagram where ever necessary. Figures on the right show marks.

Q.1. Answer the following MCQs.

(08)

1. _____ levels of drug is required to maintain in the blood stream for effectiveness
A. Toxic B. Critical C. Therapeutic D. All of these
2. _____ dosage form is used for topical applications
A. Solid B. Semi solid C. Nasal D. Ophthalmic
3. In _____ coated tablets weight increases by 50%
A. Sugar B. Compression C. Film D. Wrapped
4. _____ is a type of liquid dosage form
A. Lozenges B. Elixir C. cream D. Gel
5. _____ is used as a lubricant in tablets.
A. Cellulose B. Starch C. Citric acid D. Magnesium stearate
6. The drug concentrations, released from controlled released dosage forms fluctuate within the ____
A. Mini.effective level B. Therapeutic level C. Toxic level D. All of these
7. _____ are preferred for therapeutic peptide/protein for the controlled drug delivery in place of parenteral(injection) administration.
A. Tablet B. Capsule C. Microsphere D. Lotion
8. _____ is the first step in the rational development of a dosage form.
A. Preformulation B. Formulation C. Pharmacokinetics D. Pharmacodynamics

Q.2 Answer the following short questions (Any 7)

(14)

1. Differentiate between drug and Pharmaceutical.
2. Enlist the various methods of treating illness.
3. Differentiate between type A and type B gelatin.
4. Differentiate between controlled released dosage form and normal dosage form
5. What is effervescent tablet?
6. Define gels
7. What are excipients?
8. What is Glidant? give example.
9. What is elixir?

Q.3 (a) What is solid dosage form? Discuss the advantages of tablets as a solid dosage form and also explain lozenges and chewable tablets. (06)

Q.3 (b) What is capsule? Discuss the types of capsules and their manufacturing process. (06)

OR

Q.3 (b) What are semi-solid dosage forms? Explain their role in drug delivery and also discuss ointments and creams. (06)

Q.4 (a) What are controlled release dosage forms? Discuss their rationale and enlist their various types. (06)

Q.4 (b) Discuss various methods for peptide/protein-loaded microsphere production. (06)

OR

Q.4 (b) What is microencapsulation? Discuss various methods of encapsulation in brief. (06)

Q.5 (a) Explain preformulation studies. Discuss preformulation studies with respect to Physical characteristics of a drug substance in brief. (06)

Q.5 (b) Write a note on Tableting cycle. (06)

OR

Q.5 (b) Discuss rotary punch Tableting machine and highlight the main differences of single punch and rotary punch tableting machines. (06)

Q.6 (a) What is GMP? Describe its guideline in brief. (06)

Q.6 (b) What is GLP? Describe its guideline in brief. (06)

OR

Q.6 (b) What is validation? Explain various types of validation. (06)