

B PHARMACY FOURTH YEAR SECOND SEMESTER EXAMINATION 2019

SUBJECT: PHARMACEUTICS VIII

Time 3 hours

Full marks: 100

Group A

Answer at least TWO questions from each group:

1. (a) Define the term "Pharmacokinetics". Draw a plasma concentration vs. time and show on the curve and explain the following terms:

Onset of action, C_{max} , therapeutic window, MEC.

(b) Determine K_a by residual method. Why the method is called "peeling method"?

(c) Establish time-concentration relationship in a capacity limited process equation.

$$10+4+2+4 = 20$$

2. (a) Define C_{ss} . Determine C_{ss} from $(C_{\infty})_{min}$. Define loading dose. Give its importance. What is called accumulation factor? Deduce the accumulation factor from $(c_{\infty})_{min}$. Write its significances.

(b) To maintain 3mg/ml blood level of a drug using a loading dose and a simultaneous use of iv infusion was administered to get C_{ss} 2.5 mg/ml blood level, calculate loading dose and rate of infusion, if KE $0.15h^{-1}$ and V_d is 16 L.

$$2+4+2+1+2+ 3+2+4 = 20$$

3. (a) Deduce K_a from Wagner-Nelson method. How is it different from Loo-Riegelman method?

(b) What do you mean by compartmental model? Give its assumptions. Write its significances.

(c) A drug (x_0 amount) is injected into blood and after time "t", drug has been distributed in liver, lungs and kidneys. Draw the compartmental model and develop the equation.

$$5+2+2+5+2+4 = 20$$

4th YEAR 2nd SEMESTER EXAMINATION, 2019

SUBJECT PHARMACEUTICS VIII
GROUP - B

Full marks: 100/100

Time: Three hours

1. (a) What do you understand by Hospital Pharmacy? Elaborate its functions. 4+6
(b) On the basis of the merits and limitations differentiate between prescription order system and unit dose dispensing system. 10

 2. (a) What do you mean by the term "Hospital Formulary System"? Explain the process involved in the preparation of the Formulary. 4+6
(b) Elaborate the various sources of Drug information Services. 10

 3. (a) Describe the various objectives and functions of Pharmacy and Therapeutic Committee. 7+5
(b) Elaborate the role of Pharmacist in DIC. Why such a centre is essential in hospital? Write a note on Drug Information Bulletin. 3+2+2
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