M. PHARMACY (Regular) DEGREE EXAMINATIONS, DECEMBER-2022

Second Semester

PHARMACEUTICS

COMPUTER AIDED DRUG DELIVERY SYSTEM

Time : **Three Hours**   Maximum : 75 Marks

SECTION - A

Answer any FIVE Questions.   5x5 = 25 M

1. Write role of P-gp efflux transporters in drug disposition.

2. Write the benefits of QbD in industry and regulation bodies.

3. Write about computer simulations in whole organism.

4. Discuss the role of Nucleoside transporters.

5. Write about optimal designs.

6. What is QbD and ICHQ8 guidelines. Discuss.

7. Differentiate descriptive Vs mechanistic modeling.

SECTION - B

Answer any FIVE Questions.   5x10 = 50 M

8. Discuss the history of computers in pharmaceutical research & development.

9. Write applications of computer in various Intellectual property right of pharmaceutical R&D.

10. Discuss various statistical modeling in pharmaceutical research and development.

11. a) Write a note on, computer simulation in gastro intestinal absorption.

    b) Variables and confounding in optimization.

12. Explain pharmaceutical automation role in dosage form manufacturing.

13. a) Write the applications of computer aided techniques in development of pharmaceutical emulsion.

    b) Computers in market analysis.

14. a) Discuss the importance of computational fluid dynamics in Pharmacy.

    b) Add a note on parameter sensitive analysis.

Total No. of Questions : 14]

MPH 203 T

[Total No.of Pages : 01

M. PHARMACY (REGULAR) DEGREE EXAMINATIONS, JANUARY-2022

Second Semester

PHARMACEUTICS

COMPUTER AIDED DRUG DELIVERY SYSTEM

Time : Three Hours

Maximum : 75 Marks

SECTION - A

Answer any FIVE Questions.   5x5 = 25 M

1. Write about Biowaiver considerations.

2. Discuss the ethics of computing in pharmaceutical research.

3. Describe the different levels of Invitro-Invivo correlation.

4. What is artificial intelligence. Mention its applications.

5. Explain computational modelling concept with respect to drug absorption & solubility.

6. Write the benefits of pharmaceutical automation in packaging.

7. Mention the role of influx transporters with example.

SECTION - B

Answer any FIVE Questions.   5x10 = 50 M

8. Explain the role of computers in clinical data collection and management.

9. Outline QBD concept in pharmaceutical product development with respect to ICH guidelines.

10. Discuss different optimization techniques in formulation development.

11. What is modelling ? Explain computational modelling of drug disposition.

12. Explain in detail about computer aided formulation development.

13. Discuss importance of computers in market analysis.

14. a) Write significance of Robotics and its applications in Pharmacy.

    b) Applications of computers in Patents.

Total No. of Questions : 14]   [Total No.of Pages : 01

M. PHARMACY DEGREE EXAMINATIONS, AUGUST - 2021
Second Semester
PHARMACEUTICS
COMPUTER AIDED DRUG DELIVERY SYSTEM

Time : **Three Hours**   Maximum : 75 Marks

SECTION - A

Answer any FIVE Questions.   5x5 = 25 M

1. Explain artificial intelligence. Mention its applications.

2. Discuss the importance of computer simulation in pharmacodynamics.

3. Mention the regulatory and Industrial views on quality by design.

4. Discuss the role of Nucleoside and DCT transporters.

5. Explain the role of variables and confounding in optimization.

6. Write a note on statistical and population modelling.

7. Discuss about Biowaiver considerations.

SECTION - B

Answer any FIVE Questions.   5x10 = 50 M

8. Enumerate the history of computers in pharmaceutical research & development.

9. Explain the role of computers in clinical data collection and management.

10. Discuss the optimization parameters and different optimization techniques in formulation development.

11. Explain the computational modelling concept with respect to drug absorption and solubility.

12. Discuss current challenges and future directions of artificial intelligence and robotics and its applications.

13. a) Write about efflux transporters with suitable examples.

    b) Add a note on ICHQ8 guidelines.

14. a) Differentiate descriptive Vs mechanistic modelling.

    b) Describe the different levels of IV-IV correlation.

MPH 203 T

M.PHARMACY (Regular) DEGREE EXAMINATIONS, NOVEMBER-2020

Second Semester

M.PHARMACY (PHARMACEUTICS)

COMPUTER AIDED DRUG DELIVERY SYSTEM

Time: Three Hours

Maximum marks:75

SECTION-A

Answer any FIVE Questions   5X5=25M

1. Discuss the role of computers in pharmaceutical emulsion development.
2. Write the benefit of pharmaceutical automation in packaging.
3. Describe the different levels of Invitro-Invivo correlation.
4. Write about computer simulations in gastro intestinal absorption.
5. Write about robotics and its applications in pharmacy.
6. Discuss the use of computers in clinical development.
7. Write a note on optimal design and applications of scientifically based QbD.

SECTION-B

Answer any FIVE Questions   5X10=50M

8. Give an Overview of artificial intelligence and its applications in pharmaceuticals.
9. Outline the Quality by design concept in pharmaceutical product development with respect to ICH.
10. What is modelling? Explain computational modelling of drug disposition.
11. Explain in detail about computer aided formulation development.

P.T.O

12. Discuss the common issues of computer ethics in Research and development and in market analysis.

13. Describe role of computer simulations in pharmaco-kinetics and pharmacodynamics.

14. Write a note on following:

    i) Role of influx transporters with examples.

    ii) Factorial designs.

M.PHARMACY (Supple) DEGREE EXAMINATIONS, FEB/MAR-2020
Second Semester
M.PHARMACY
PHARMACEUTICS
COMPUTER AIDED DRUG DELIVERY SYSTEM

Time: Three Hours

Maximum marks:75

SECTION-A

Answer any FIVE Questions

5X5=25M

1. Write a short note on statistical Modelling.

2. Discuss the regulatory and Industrial views on quality by design.

3. Define active transport and discuss about BBB-choline transporter.

4. Write a short note on Invitro-Invivo correlation.

5. Discuss the role and significance of computers in clinical development.

6. What do you mean by factorial designs in optimization technology. Discuss?

7. Explain various applications of artificial Intelligence.

SECTION-B

Answer any FIVE Questions

5X10=50M

8. Enumerate the history of computers in pharmaceutical research and development.

9. Discuss the optimization parameters and different optimization techniques in formulation development.

10. Write in detail the importance of computer simulation in pharmaco-dynamics.

11. Explain pharmaceutical automation role in dosage form manufacturing.

12. Explain the computational modeling concept with respect to drug absorption & solubility.

P.T.O

13. What do you mean by "Biowavier Consideration" and where do you apply these biowavier consideration studies.

14. Discuss how to screen various parameters in pharmaceutical product development by using computers.

———————————