

School of Medical and Allied Sciences

Master of Pharmacy in Pharmaceutics
Summer Term Examination - Jul / Aug 2024

Duration : 180 Minutes
Max Marks : 75

Sem II - MPC203T - Computer Aided Drug DesignGeneral Instructions

Answer to the specific question asked

Draw neat, labelled diagrams wherever necessary

Approved data hand books are allowed subject to verification by the Invigilator

- 1) Demonstrate the virtual screening concept of pharmacophore. K2(2)
 - 2) Demonstrate the utility of homology model in drug design. K2(2)
 - 3) Show the polar atoms with example. K1(2)
 - 4) Demonstrate the identification of pharmacophore. K2(2)
 - 5) Define high throughput screening. K1(2)
 - 6) Demonstrate molar refractivity with example. K2(2)
 - 7) Define computer added drug design. K1(2)
 - 8) Demonstrate molecular mechanics. K2(2)
 - 9) In rigid docking, which components of the molecular system are considered flexible? K1(2)
 - 10) Recall the term target in drug discovery. K1(2)
 - 11) Identify QSAR Equation with their application. K3(5)
- OR**
- Apply the knowledge on rationale for QSAR analysis. K3(5)
- 12) Describe how you would integrate ADMET prediction data with experimental results in the drug development process? K3(5)
 - 13) Examine the Drug-like properties with example. K4(5)
 - 14) Evaluate the effectiveness of using ADMET prediction tools in early drug discovery compared to relying solely on experimental testing. K3(5)
 - 15) Analyze the application of molecular modelling in drug discovery. K4(5)
 - 16) Analyze Descriptors (Molecular properties) in QSAR. K4(5)
- OR**
- Simplify drug receptor interactions with examples. K4(5)
- 17) Simplify pharmacophore mapping with example. K4(5)
 - 18) Elaborate the virtual screening techniques with suitable example. K6(10)
 - 19) Asses the different techniques used in CADD. K5(10)

OR

Design a methodology to evaluate the historical development and current trends in QSAR research.

K5(10)