

FINAL EXAMINATION

**INSTRUCTIONS: ANSWER ALL THE QUESTIONS IN THE ANSWERS SHEET
PROVIDED**

TIME: 3 HOURS

1. Discuss what you understand by the following terms as they have been used in rational drug design and Qsar. **(20 Marks)**
 - a) **Qsar** –
 - b) **Drug** –
 - c) **Molecular docking** –
 - d) **Comparative molecular movement analysis** –
 - e) **COMFA (Comparative molecular field analysis)** –
2. List and discuss FIVE factors that affect drug discovery and development **(20 Marks)**
3. Once a drug has been developed, it has to reach the consumers hand in the dosage form it should be formulated. State Four parameters that should be considered. **(10 Marks)**
4. When building a new oral designer drug, there are basic requirements to adhere to. State Five **(10 Marks)**
5. State FIVE purposes of QSAR **(10 Marks)**
6. State FIVE advantages of computer aided drug design CADD. **(10 Marks)**

7. State FOUR principal steps of QSAR/ QSPR studies **(10 Marks)**

8. What do you understand by molecular descriptors used in Qsar? **(10 Marks)**