

Reg. No .....

Name .....

19P4031

**MSc DEGREE END SEMESTER EXAMINATION - MARCH/APRIL 2019**

**SEMESTER 4 : PHARMACEUTICAL CHEMISTRY**

**COURSE : 16P4CPHT15EL : PHARMACEUTICAL CHEMISTRY - IV**

*(For Regular - 2017 Admission and Supplementary - 2016 Admission)*

Time : Three Hours

Max. Marks: 75

**Section A**

**Answer any 10 (2 marks each)**

1. What are Nonclassical bioisosteres? Give examples.
2. What is regression or correlation coefficient? What value of this coefficient is acceptable for biological data?
3. Explain with a suitable example, how the chemical modifications altering the log P values can be effectively utilised to remove central nervous system side effects.
4. What is a target compound?
5. What are the limitations of CADD?
6. What is Tentagel? Give its use.
7. How are the thiol groups protected in solid phase synthesis?
8. Give the structural details and mechanism of action of nitrogen mustards.
9. Comment on the role of hormones as anticancer agents.
10. Give the functions of sympathetic nervous system
11. What are adrenergic agonists? Give examples
12. What are the uses of enflurane?
13. What are benzodiazepines? Give any one example with structure.

**(2 x 10 = 20)**

**Section B**

**Answer any 5 (5 marks each)**

14. What are prodrugs? How are they classified? Give examples.
15. Outline the use endogenous compounds as drugs citing examples.
16. What do you mean by Taft's steric factor? Explain the parameters.
17. Write a note on CoMFA.
18. Give an account on combinatorial organic synthesis.
19. Give an account on high throughput screening of libraries.
20. What are anticholinesterases? How are they classified? Give examples.
21. Write a note on oxazolidinone diones which are used as anticonvulsant drugs.

**(5 x 5 = 25)**

**Section C**

**Answer any 2 (15 marks each)**

22. Write short note on molecular modelling applications.
23. Write a note on antibiotics and plant products used as anticancer agents.
24. Give an account of adrenergic and cholinergic receptors
25. Write a note on analeptics. Explain their structure, classification and properties.

**(15 x 2 = 30)**