

B Pharm 4<sup>th</sup> Yr 2<sup>nd</sup> Sem Special 2022

## Medicinal Chemistry IV

Full Marks 70

Time 4 hour

## Group A

Answers should be to the point and brief, and written in the same order as they appear in the Question Paper.

1. Compare and contrast sigma and pi values of the hydroxy and chloro groups as aromatic substituents with detailed explanations.

Or

Write a note on Comparative Molecular Field Analysis. [20]

2. Explain different steric substituent constants.

Or

Write on the role of graphs and equations in QSAR modeling studies.

[15]

## Group B

3. Answer any two of the followings [2x7.5 = 15]

- SAR of Vitamin K
- Chemistry of Vitamin E
- Bio-chemical function of Vitamin B1
- Bio-chemical function of Vitamin B2

4. a) Classify oral hypoglycemic agents with suitable example. Write the structure activity relationships (SAR) of sulfonylurea derivatives. [3+7=10]

- b) Answer any two [5x2 = 10]

- Outline the synthesis of Tolbutamide
- Outline the synthesis of Vitamin C
- Outline the synthesis of Chlorpropamide
- Chemistry of Vitamin A
- Physiological role of Vitamin D.