



21102150

QP CODE: 21102150

Reg No : .....

Name : .....

**B.Sc DEGREE (CBCS) EXAMINATION, AUGUST 2021**

**Third Semester**

**COMPLEMENTARY COURSE - CH3CMT04 - CHEMISTRY - INORGANIC AND ORGANIC CHEMISTRY**

Common to B.Sc Botany Model I, B.Sc Botany Model II Environmental Monitoring And Management, B.Sc Botany Model II Food Microbiology, B.Sc Botany Model II Horticulture and Nursery Management, B.Sc Botany Model II Plant Biotechnology, B.Sc Family & Community Science Model I, B.Sc Food Science & Quality Control Model III, B.Sc Food Technology & Quality Assurance, B.Sc Zoology Model I, B.Sc Zoology Model II Aquaculture, B.Sc Zoology Model II Food Microbiology & B.Sc Zoology Model II Medical Microbiology

2017 Admission Onwards

24F4E32C

Time: 3 Hours

Max. Marks : 60

**Part A**

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. What is magic number?
2. Name any two nuclear power plants in India.
3. Define Endergonic reaction.
4. Recall cooperative effect.
5. How herbicides classified?
6. What do you mean by systemic fungicides?
7. Which is the product formed on heating furan with  $\text{NH}_3$ ?
8. Who discovered penicillin and how?
9. Why should aspirin be not taken on empty stomach?
10. Give the name and structure of the earliest artificial sweetner.
11. What is MSG? Give its structure.
12. What is the function of flouride compound in toothpastes?





(10×1=10)

**Part B**

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Differentiate between natural and artificial radioactivity.
14. Discuss the problems associated with nuclear waste disposal.
15. Discuss the mechanism of photosynthesis with the help of Z scheme.
16. Urea is considered as the best nitrogenous fertilizer. Why?
17. What are the benefits of using biofertilizers?
18. Explain Huckel's theory of aromaticity with suitable examples.
19. Describe a method for the synthesis of Purines.
20. What are stimulants? How is it function? Give two examples.
21. Briefly discuss on food colours.

(6×5=30)

**Part C**

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. What is decay constant? Derive an expression for decay constant. How is it related to half life period.
23. Write a review of the biochemistry of Zinc and Cobalt containing biological systems
24. Discuss the preparation and properties of DDT and BHC.
25. Explain the chemical properties of Pyridine.

(2×10=20)

