



21100694

QP CODE: 21100694

Reg No : .....

Name : .....

**B.Sc DEGREE (CBCS) EXAMINATION, MARCH 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

D40E18BF

Time: 3 Hours

Max. Marks : 60

**Part A***Answer any **ten** questions.**Each question carries **1** mark.*

1. Give an example for a nuclear reaction induced by protons.
2. Give an example of the use of radioactivity in medical diagnosis.
3. Define coupled reactions.
4. List any two physiological functions of Zinc.
5. What is the problem with ammonium sulphate fertilizer to soil? How can it be solved?
6. What is Gammexane? Why is it called so?
7. Write the structure of Guanine and Adenine.
8. A test dose of penicillin is given to a patient before it administrating intramuscularly. Give the reason.
9. What are stimulants? Give an example.
10. What do you understand by the term food additives?
11. Name two natural colourants.





12. What are the main constituents of face cream?

(10×1=10)

**Part B**

*Answer any six questions.*

*Each question carries 5 marks.*

13. Correlate n/p ratio and nuclear stability.

14. Discuss briefly the principle underlying atomic bomb and hydrogen bomb.

15. Illustrate the effect of partial pressure of oxygen on the oxygen binding function of haemoglobin.

16. What do you mean by plant growth hormones? Write the names of various classes of plant growth hormones.

17. What is the use of organo mercuric pesticides? Give example.

18. Propose a method each to synthesize Furan and Pyrrole.

19. Explain Fischer's Indole synthesis.

20. What is antacid? Explain its uses and mode of action.

21. Give a brief account on the composition shampoo.

(6×5=30)

**Part C**

*Answer any two questions.*

*Each question carries 10 marks.*

22. What is nuclear transmutation? Discuss briefly on different types of nuclear transmutations.

23. Explain photosynthesis using Z scheme.

24. Discuss the toxicity and environmental hazards of pesticides.

25. Discuss the aromatic nature of Furan, Pyrrole and Indole using molecular orbital theory and Huckel's rule.

(2×10=20)

