QP CODE: 24027814

24027814

Reg No : .....

Name : .....

B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, OCTOBER 2024

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

7C86F8F7

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. What is stellar energy?
3. Give two examples of mettaloporphyrins.
4. What are the functions of sodium pottasium pump?
5. Write the chemical formula of triple super phosphate?
6. Write any two advantages of using biopesticides.
7. Show that pyridine is aromatic in nature with the help of Huckel,s theory.
8. Name any two antimalarials.
9. What are stimulants? Give an example.
10. Explain the function of emulsifying agents in food processing.
11. Differentiate between drugs and cosmetics.
12. What are the main constituents of face cream?

(10×1=10)

Part B

*Answer any **six** questions.*

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

13. Differentiate between natural and artificial radioactivity.

14. Explain rock dating and carbon dating.

15. Summarise the importance of thermodynamics in biological systems.

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. Discuss the electrophilic substitution reactions of indole.

19. Describe a method for the synthesis of Purines.

20. How are drugs classified? Give examples of each class.

21. Discuss the role of leavening agents and taste enhancers in food industry.

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. Explain the concepts that account for the stability of nucleus.

23. Describe the sructure and functions of Cytochromes and Ferredoxin.

24. Discuss the toxicity and environmental hazards of pesticides.

25. Discuss the chemical properties of Furan.

(2×10=20)