QP CODE: 19102254

19102254

Reg No : .....

Name : .....

B.Sc. DEGREE (CBCS) EXAMINATION, OCTOBER 2019

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

834FF3B6

Maximum Marks: 60 Time: 3 Hours

Part A

*Answer any **ten** questions.*

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

1. Name the four radioactive series.
2. Half life period of a radioactive element is 50 seconds. Calculate the time for its 12.5 % decay.
3. What are the major functions of Cytochromes?
4. Define light reactions in photosynthesis.
5. Give two examples of micro nutrients.
6. What is 2,4-D?
7. What is Chichibabin reaction?
8. What is chloroquine?
9. What is mean by drug abuse?
10. List any two antioxidants.
11. Give two names permitted food colours under PFA rules.
12. Mention the role of parabens in cosmetics.

(10×1=10)

Part B

*Answer any **six** questions.*

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

13. What are isotopes, isobars and isotones? Explain with suitable examples.
14. Explain rock dating and carbon dating.
15. Give a short account of the thermodynamics of biochemical reactions.
16. The NPK value of a fertilizer is given as 17:17:17. What does it imply?
17. How is DDT prepared?
18. Explain the aromaticity of Pyrrole and Pyridine using Huckel's rule
19. Discuss a method for the synthesis of Pyrimidine.
20. What are antibiotics? How are they classified?
21. Name any three artificial sweetners and draw their structure.

(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 biochemical functions of haemoglobin and myoglobin
24. What are fungicides? How are they classified? Give the preparation of any two fungicides.
25. Discuss the chemical properties of Furan.

(2×10=20)