



QP CODE: 18103559

Reg No	:	
Name	:	

# **B.Sc. DEGREE (CBCS) EXAMINATION, NOVEMBER 2018**

#### **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

4C40AEE6

Maximum Marks: 60 Time: 3 Hours

#### Part A

Answer any ten questions.

Each question carries 1 mark.

- 1. Give the expression for calculating binding energy of nucleus.
- 2. What is stellar energy?
- 3. Define light reactions in photosynthesis.
- 4. What are the functions of sodium pottasium pump?
- 5. What is Muriate of Potash chemically?
- 6. Write the structure of DDT.
- 7. Draw the structure of uracil and Cytosine.
- 8. What is chemotherapy?
- 9. Name any two antidepressants.
- 10. Name two artificial sweetners.
- 11. What do you understand by leavening agents? Give an example.
- 12. Differentiate between drugs and cosmetics.

 $(10 \times 1 = 10)$ 

#### Part B

Answer any **six** questions.

Each question carries 5 marks.

- 13. Discuss briefly on radiactive series.
- 14. Explain the properties of alpha, beta and gama rays.



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- 15. Summarise the role played by haemoglobin in oxygen transport.
- 16. How is Bordeaux mixture prepared?
- 17. What is BCF value in toxicology? What are its applications?
- 18. How are heterocyclic compounds classified? Give two examples for each class.
- 19. Explain the nucleophilic substitution reactions of Pyridine.
- 20. Give the structure, uses and mode of action of chloroquine.
- 21. Distinguish between (a) deodorants and antiperspirants (b) perfume and cologne

 $(6 \times 5 = 30)$ 

### Part C

Answer any **two** questions.

Each question carries 10 marks.

- 22. Describe the applications of radioactive isotopes in industry, agriculture and medicine.
- 23. Describe the sructure and functions of Cytochromes and Ferredoxin
- 24. Describe the role of micronutrients in the soil.
- 25. Discuss the chemical properties of Furan.

 $(2 \times 10 = 20)$ 

