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### BACHELOR'S DEGREE (C.B.C.S) EXAMINATION, NOVEMBER 2024 2023 ADMISSIONS REGULAR

# SEMESTER III - COMPLEMENTARY COURSE 1 CH3B01B23 - Inorganic and Organic Chemistry

Time : 3 Hours

Maximum Marks : 60

#### Part A

## I. Answer any Ten questions. Each question carries 1 marks

(10x1=10)

- 1. Define a Curie.
- 2. Summarize how do elements with high n/p ratio attain stability.
- 3. Interpret low packing fraction value.
- 4. List the molecules absorbed and released during photosynthesis.
- 5. Differentiate between open formula and closed formula fertilizer mixtures.
- 6. Recall the element present in vitamin B12.
- 7. Explain Gattermann Koch reaction.
- 8. Illustrate a method of preparation of furan.
- 9. Recall the chemical name of paracetamol.
- 10. Describe the mode of action of dispirin.
- 11. List the qualities of an ideal artificial sweetener.
- 12. Summarize the functions of food additives.

#### Part B

#### II. Answer any Six questions. Each question carries 5 marks

(6x5=30)

- 13. Explain the power reactors in India.
- 14. Discuss the applications of radioactive isotopes in the feild of medicine.
- 15. Explain the role of Manganese in plant growth.
- 16. Discuss on the advantages and disadvantages of mixed fertilizers.
- 17. Explain the main objectives for using fungicides.
- 18. Discuss any five reactions of pyridine.
- 19. Explain the physical and chemical properties of pyridine.
- 20. Explain the composition and side effects of talcum powder.
- 21. Discuss on the harmful effects of cosmetics.

#### Part C

#### III. Answer any Two questions. Each question carries 10 marks

(2x10=20)

- 22. Discuss briefly the uses of radioisotopes in carbon dating and rock dating.
- 23. Discuss the classification of pesticides based on their chemical nature, mode of action, function and method of application.
- 24. Describe fungicides and their uses. Explain the different types of fungicides with examples.
- 25. Discuss drug addiction, its effects and preventive measures.