

B.Sc. DEGREE EXAMINATION, NOVEMBER 2019
II Year III Semester
General Chemistry - VI

Time : 3 Hours

Max.marks :60

Section A ($10 \times 1 = 10$) Marks

Answer any **TEN** questions

1. Write a method of preparation of cinnamic acid.
2. What is transesterification reaction? Give an example.
3. Calculate the equivalent weight of $K_2Cr_2O_7$.
4. What is the principle involved in iodometric titration?
5. Mention any two withdrawal systems of alcohol addiction.
6. Write the common adulterants found in chilli powder.
7. What are primary and secondary standards? Give example.
8. How will you prepare 2 M H_2SO_4 in 1000 mL. The molarity of the concentrated sulphuric acid is 18 M.
9. How is lead tetraethyl prepared? Mention its use.
10. Write Reformatsky reaction.
11. Write an equation to the opening of an epoxide ring under mild acidic condition.
12. Mention two colours permitted in food industries.

Section B ($5 \times 4 = 20$) Marks

Answer any **FIVE** questions

13. Discuss Curtius rearrangement.
14. Write short notes on food additives.
15. What is meant by complex formation titration? Mention its applications.
16. Explain the role of Emulsifiers and Antioxidants in food additives.
17. How the adulterants present in tea and ghee are tested?
18. What is the principle involved in redox titration? Explain with a suitable example.
19. How is $LiAlH_4$ prepared? Explain its chemical properties.

Section C ($3 \times 10 = 30$) MarksAnswer any **THREE** questions

20. a. Discuss Claisen condensation and Dieckmann reaction. (6)
b. Explain the effect of substituent on acidity of aromatic carboxylic acid. (4)
21. a. What are synthetic applications of Grignard reagent? Explain in detail. (7)
b. List the ingredients present in soft drinks. (3)
22. a. Describe the ill effects of consumption of alcohol. (5)
b. Write a short note on the theories of indicators. (5)
23. a. Explain iodimetric and precipitation titrations. (6)
b. Discuss the types indicators used in volumetric analysis. (4)
24. a. How to identify and prevent the food from adulteration? (5)
b. Write a note on preparation and preservation of fruit juices. (5)

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