B.Sc. DEGREE END SEMESTER EXAMINATION OCTOBER/NOVEMBER 2018

SEMESTER –5: CHEMISTRY (CORE COURSE)

COURSE: **15U5CRCHE06: ORGANIC CHEMISTRY III**

(Common for Regular 2016 admission & Supplementary 2015 admission)

Time: Three Hours   Max. Marks: 60

SECTION A

*Answer **all** questions. Each question carries **1** mark*

1. Explain tautomerism exhibited by primary and secondary nitro compounds.

2. What is Cationic detergents?

3. Explain Nitrogen rule.

4. What is Teflon? How is it prepared?

5. Explain Tollen's test.

6. Explain the term "magnetic anisotropy".

7. What is chromophore?

8. Write down the chemical structure of ampicillin.   (1 x 8 = 8)

SECTION B

*Answer **any Six** questions. Each question carries **2** marks*

9. Explain mechanism of sandmeyer's and Gattermann reaction.

10. Explain preparation and structure of phenolphthalein.

11. What is Gabriel phthalimide synthesis?

12. Explain Homotopic hydrogen atoms with example.

13. What is LDA and point out any two applications?

14. Explain medicated and transparent soap.

15. Write down the comparison between photochemical versus thermal reactions.

16. Explain preparation and uses of Nylon- 6, 6.   (2 x 6 = 12)

SECTION C

*Answer **any Four** questions. Each question carries **5** marks*

17. Write down synthesis and uses of sulphanilamide and chloroquine.

18. Explain preparation, properties and uses of Epoxy resins.

19. a) What is detergent action of soap?

    b) Explain environmental aspects of detergents.

20. Explain Hinberg's method for separation of amines.

21. Write down the synthesis of these dyes.

    a) Fluorescein   b) Indigo

22. Write a note on alkylating agents used in cancer therapy.   (5 x 4 = 20)

SECTION D

*Answer **any two** questions. Each question carries **10** marks*

23. Explain relative basicity of amines.

24. Write a note on Antipyretics and Analgesics with examples and including its synthesis?

25. Explain instruments used for IR spectroscopy?

26. Write a note on structure of butadiene on the basis of M.O theory.   (10 x 2 = 20)

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