

B. Sc. DEGREE END SEMESTER EXAMINATION - MARCH 2020SEMESTER – 2: **COMPLEMENTARY COURSE FOR BSC PHY./ BOT./ ZOO.**COURSE: **15U2CPCHE2, BASIC ORGANIC CHEMISTRY***(For Supplementary / Improvement 2018, 2017, 2016, 2015 Admissions)*

Time: Three Hours

Max. Marks: 60

PART - A*Answer all questions. Each question carries 1 mark.*

1. Petroleum refining is an example of
2. is purified by crystallation.
3. Fumaric acid is geometrical isomer.
4. The separation of racemic mixture is known as
5. Give an example for a thermosetting polymer.
6. Most stable conformation of n-butane is
7. Which one has higher pKa value acetic acid or formic acid
8. What are the monomers of nylon-66. (1 × 8 = 8)

PART - B*Answer any six questions. Each question carries 2 marks.*

9. How will you purify a solid?
10. Staggered conformation of ethane is more stable than eclipsed why?
11. Maleic acid forms an anhydride readily than fumaric acid why?
12. What is meant by asymmetric carbon atom?
13. Tertiary carbocations are more stable than primary Why?
14. What is Khrash or peroxide effect? Write an example.
15. Give the preparation of two condensation polymers.
16. What are bio-degradable polymers?

(2 × 6 = 12)**PART - C***Answer any four questions. Each question carries 5 marks.*

17. Draw all isomers but-2-ene and lactic acid.
18. Draw all conformations of n-butane and draw a potential energy Vs Dihedral angle graph.
19. Differentiate between thermosetting and thermoplastics with examples.

20. Explain Markonikoffs rule with an example
21. Discuss the mechanism of nitration of benzene.
22. How do the basicity of primary, secondary and tertiary amines vary in vapour phase? Explain.

(5 × 4 = 20)

PART - D

Answer any two questions. Each question carries 10 marks

23. Discuss the geometrical and optical isomerism with examples
24. Discuss the mechanism of any four aromatic electrophilic substitution reaction.
25. What are the important classification of polymers?
26. Write a note on formation and stability of carbocation, carbanions and stability.

(10 × 2 = 20)
