



K20U 0096

Reg. No. : .....

Name : .....

VI Semester B.Sc. Degree (CBCSS-Reg./Supple./Improv.)

Examination, April 2020

(2014 Admission Onwards)

CORE COURSE IN CHEMISTRY

6 B17 CHE C : Polymer Chemistry

Time : 3 Hours

Max. Marks : 40

SECTION – A

(Answer **all** questions. **Each** question carries **one** mark.)

1. Expand PMMA.
2. What are copolymers ?
3. What are composites ?
4. List the monomers of nylon 66.

(1×4=4)

SECTION – B

(Answer **any seven** questions. **Each** question carries **2** marks.)

5. Write two uses of teflon.
6. What are isotactic and atactic polymer ?
7. What is insertion polymerization ? What is the catalyst used ?
8. What are semisynthetic polymers ? Give example.
9. Define glass transition temperature. What is its importance ?
10. What are graft and block polymers ?

P.T.O.



11. What is bakelite ? How is it prepared ?
12. Distinguish between HDPE and LDPE.
13. Explain the applications of rayon.
14. Draw the structures of a) Teflon b) PET. (7×2=14)

### SECTION – C

(Answer **any 4** questions. **Each** question carries **3** marks.)

15. What are the factors affecting Tg ?
16. Write a note on conducting polymers.
17. Explain the use of polymers in medical field.
18. Describe compression moulding ?
19. Explain the applications of PMMA.
20. Explain ionic polymerization. (3×4=12)

### SECTION – D

(Answer **any 2** questions. **Each** question carries **5** marks.)

21. Explain the following types of polymerization, (a) addition (b) condensation (c) ring opening.
22. Describe the synthesis of three synthetic rubber.
23. Discuss the environmental hazards due to plastics. What are the remedial measures ?
24. Discuss the classification of polymers. (5×2=10)