



Uva Wellassa University of Sri Lanka
Faculty of Science & Technology
Science & Technology Degree Program

3rd year 1st Semester Examination – September/October 2015

SCT 432-1 Industrial Organic Chemistry

Number of questions: Three (03)

Answer all questions.

Time allocation: One (01) hour

Total marks allocated: 100 marks

1.

- a. Can vinylidene chloride ($\text{CH}_2=\text{CCl}_2$) be polymerized by anionic polymerization? Justify your answer. (Marks 12)
- b. Write the complete reaction steps for the polymerization of vinylidene chloride. (Marks 12)
- c. Write the polymerization reaction for preparing Nylon 6, 8. Why is the melting temperature of Nylon 6, 8 lower than that of Nylon 6, 6? (Marks 12)

2.

- a. Compare the bulk polymerization process and solution polymerization process. (Marks 15)
- b. Discuss the importance of octane rating and the three techniques used to obtain high octane numbers for petrol. (Marks 15)

3.

- a. Explain the uses of quinoline group alkaloids. (Marks 12)
- b. What are the main ingredients used in nail polish? Outline the manufacturing process of nail polish. (Marks 10)
- c. List the main types of additives used in printing inks and describe their functions. (Marks 12)