



THE ANSWERS MUST BE ATTEMPTED ON THE ANSWER SHEET PROVIDED

Q.1. Answer the following short questions.

(15x2=30)

- i. What are main difference between thermoplastics and thermosetting polymers?
- ii. Describe the term tacticity and give examples.
- iii. What is anionic polymerization, which solvents are used in this process?
- iv. What are co-polymers, explain your answer with examples.
- v. Briefly explain addition polymerization process.
- vi. Write down the main processes involved in sugar industry.
- vii. What is inverted sugar?
- viii. What do you understand about “carbonation in sugar industry”?
- ix. Briefly describe the term refined sugar?
- x. What do you know about reducing sugars, give examples?
- xi. What is water gas and how it is produced?
- xii. Differentiate between lignite and anthracite coal.
- xiii. What is producer gas and how it is made?
- xiv. How coke is utilized in steel industry?
- xv. Write names of four natural polymers.

Q.2. Answer the following questions.

(6x5=30)

- i. Explain the mechanism of condensation polymerization, with examples?
- ii. Write down the main difference between bulk and solution polymerization processes.
- iii. What do you understand about “Defection” process, explain its importance in sugar industry?
- iv. Explain imbibition process, discuss its importance during cane juice extraction.
- v. Describe the oxygenolysis and hydrogenolysis processes of coal.
- vi. Compare low temperature and high temperature carbonization processes.