



THE ANSWERS MUST BE ATTEMPTED ON THE ANSWER SHEET PROVIDED

Q.1. Write short answers to the following questions. (15x2=30)

1. Differentiate between thermoplastic and thermosetting polymers?
2. Write two major differences between chain growth and step growth polymerization methods.
3. What do you understand about glass transition temperature of polymers?
4. What types of catalyst are used in anionic polymerization, give examples?
5. Name two important techniques of polymer fabrication?
6. Explain the difference between homo polymers and co-polymers?
7. What do you understand about dextrin?
8. Write four important applications of starch.
9. What is an inverted sugar?
10. Why carbonation of sugarcane juice is carried out?
11. What is brix value of sugar?
12. Write two main differences between lignite and anthracite coal.
13. What do you know about SNG?
14. What is the significance of coal gasification?
15. What is difference between wet and dry natural gas?

Q.2. Write detailed answers to the following questions. (6x5=30)

1. Discuss the free radical polymerization with mechanism, also give examples?
2. Explain the term tacticity, also differentiate between isotactic and syndiotactic polymers with examples?
3. Describe the Sulphitation process in sugar industry, what is the main drawback of this process?
4. How the refining process of sugar is carried out?
5. Compare low temperature and high temperature carbonization processes and their products?
6. Explain the hydrogenation process of coal and its main products.