

Biology - 10th Class Biology English Medium Chapter 17 Preparation

Q1. What is carbohydrate fermentation? Ans 1: The initial steps of carbohydrate fermentation are identical to those of respiration. The process begins with glycolysis, in which the glucose, molecule is broken down into two molecules of pyruvic acid Q2. What is fermenter? Ans 1: Fermenter is a device that provide optimum environment to microorganisms to grow into a biomass, son that they can interact with a substrate, forming the product. Fermentation is carried out in fermenters Q3. What is batch fermentation? Ans 1: In this process, tank of fermenter is filled with raw materials to be fermented . The temperature and pH is properly adjusted and nutrients are added . All material is sterilized . Pure culture of micro organisms is added to fermenter are taken out . Fermenter is cleaned and the process is repeated Q4. What is fermentation? Ans 1: Fermentation is the process in which there is incomplete oxidation reduction of glucose fermentation has been in the knowledge of mansicne centuries, but it was believed that it is purely a chemical process. Q5. In biotechnology, What is meant by genetically modified organism. (GNO) How is it made? Ans 1: GMO are provided suitable culture medium for growth to give as much copies of the genes of interest as needed Q6. What is beta endorphins? Ans 1: It is a pain killer produced by brain in human but it can also be produce by genetic engineering. Q7. What is fermentation? Ans 1: Fermentation is the process in which there is incomplete oxidation -reduction of glucose . Fermentation has been in the knowledge of man since centuries, but it was believed that it is purely a chemical process

Q8. Give three objectives of genetic engineering?

Ans 1: The important objectives of genetic engineering are as follows

- 1: Production of particular RNA and protein molecules
- 2: Production of various of plants having particular desirable characteristics
- 3: Treatment of genetic defects in higher organisms

Q9. Give three objects of genetic engineering.

Ans 1: i. Production of particular RNA and protein molecules.

- ii. production of varieties of plants having particular desirable characteristics.
- iii. Treatment of genetic defects in higher organisms.

Q10. What is lactic acid fermentation?

Ans 1: The process of fermentation in which pyruvic acid is reduced to lactic acid. It is carried out by streptococcus, lactobacillus species