Biology (New Book) - 10th Class Biology English Medium Chapter 17 Preparation

Q1. How insulin is synthesized commercially ?

Ans 1: Human insulin genes was transferred into bacteria . The genetically modified bacteria become able to synthesize insulin . Diabetics are now receiving this insulin

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Q2. How would you define fermentation with reference to biotechnology?

Ans 1: In biotechnology fermentation means the production of any product by the mass culture of micro organisms is called fermentation.

Q3. In biotechnology, what is meant by Genetically Modified Organism. ? 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.

Q4. What is fermenter?

Ans 1: Fermenter is a device that provides optimum environment to microorganisms to grow into a biomass, so that they can interact with a substrate, forming the product. Fermentation is carried out to fermenters.

Q5. What is genetic engineering?

Ans 1: Genetic engineering i.e. the artificial synthesis, modification, removal, addition and repair of the genetic material are considered as modern biotechnology. It is done to alter the characteristics of organisms.

Q6. Name any two industrial products made by fermentation.

Ans 1: Cereal products , Diary products.

Q7. 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

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Q8. 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

Q9. 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

Q10. What is carbohydrates 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 into two molecules of pyruvic acid.