Assignment 09

The due date for submitting this assignment has passed.

Due on 2023-01-24, 23:59 IST.

As per our records you have not submitted this assignment.

1) What factors are the advantage(s) associated with solid pretreatment of lignocellulosic biomass?
   - Removal of hemi-cellulose
   - Removal of lignin
   - Low temperatures and pressures
   - All of the above
   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   All of the above

2) The ABE fermentation is a biphasic process that converts__________
   - sugars into acids and solvents
   - acids into sugars and solvents
   - solvents into sugars and acids
   - None of the above
   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   sugars into acids and solvents

3) Which microorganism is most widely used for commercial lactic acid production from sugar and starch substrates?
   - B. Amylocicus
   - A. Feminans
   - B. Cellobiose
   - R. Japonicus
   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   B. Feminans

4) What are the major disadvantages in Simultaneous saccharification and fermentation (SSF)?
   - Longer process time
   - Lower enzyme requirement
   - Lower reaction volume
   - Both (a) and (c)
   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   Both (a) and (c)

5) If the whole grain and the residual components are separated at the end instead of the beginning of the process then it is called as the________
   - Dry-milling process
   - Wet-milling process
   - Both dry and wet milling process
   - None of the above
   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   Dry-milling process

6) The culture condition(s) on which the ABE fermentation is dependent on is/are________
   - pH
   - Product inhibition
   - Nutrient starvation
   - All of the above
   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   All of the above

7) Cellulose is a high molecular weight homopolymer consisting of__________
   - D-xylose-glucosyranose units
   - D-xylulose-glucuronic acid units
   - L-xylulose-glucuronic acid units
   - L-xylulose-glucuronic acid units
   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   D-xylose-glucuronic acid units

8) What are the disadvantages associated with solid acid pretreatment of lignocellulosic biomass?
   - Removal of hemi-cellulose
   - Increased accessible surface area
   - Little lignin removal
   - High reaction rate
   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   Little lignin removal

9) Which of the following enzymes is not a part of typical cellulase system for the bioconversion of cellulose into glucose?
   - endo-1,4-β-glucanase
   - exoglucanase
   - β-glucosidase
   - endoglucanase
   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   endoglucanase

10) The major disadvantage(s) in using distillation for product recovery of ABE fermentation broth________
    - High investment costs
    - High selectivity
    - High energy consumption
    - Both (a) and (c)
    No, the answer is incorrect.
    Score: 0
    Accepted Answers:
    Both (a) and (c)