

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 2676

Roll No.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

**B.Tech.**

(SEM. VII) ODD SEMESTER THEORY  
EXAMINATION 2013-14

**BIOFUELS AND ALCOHOL TECHNOLOGY**

Time : 3 Hours

Total Marks : 100

Note :-Attempt all questions.

1. Attempt any **four** parts of the following : (5×4=20)
  - (a) Define Scale-up and Scale-down.
  - (b) Define Top and Bottom Yeast.
  - (c) What do you understand by Biostill Fermentation ?
  - (d) What do you mean by Fermentation Efficiency and Distillation Efficiency ?
  - (e) Discuss Power Alcohol.
  - (f) Describe the parameters which are normally measured to check the progress of fermentation.
2. Write short notes on any **four** : (5×4=20)
  - (a) Proof spirit
  - (b) Sauerkraut fermentation
  - (c) Biofuel
  - (d) Single cell protein
  - (e) Champagne
  - (f) Syngas fermentation.

3. Attempt any **two** parts of the following : (10×2=20)
- (a) Explain encillium process for Alcohol Production.
  - (b) Describe various yeast strains used in breweries.
  - (c) Describe thermal gasification of biomass.
4. Attempt any **two** parts of the following : (10×2=20)
- (a) Discuss various raw materials used for ethanol production.
  - (b) Discuss the roll of yeast vessels in a distillery.
  - (c) Why fed-batch is most preferred process in fermentation industries ? Explain in detail.
5. Attempt any **two** parts of the following : (10×2=20)
- (a) What do you understand by Bioenergy ? Explain its various sources of production.
  - (b) Give a detailed flow chart of alcohol production using molasses.
  - (c) Write a short note on Fusel Alcohol.