

Printed Pages: 3

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EBT-032

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

Paper ID : 154752

Roll No.

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B. Tech.

(SEM. III) THEORY EXAMINATION, 2015-16

BIOFUELS & ALCOHOL TECHNOLOGY

[Time: 3 hours]

[Maximum Marks: 100]

SECTION-A

Attempt all parts. All parts carry equal marks. Write answer of
each part in short. (10×2=20)

1. (a) Write the name of fermentation if cabbage is used
as substrate.
- (b) Explain Gasohol.
- (c) What do you understand by fermentation
efficiency?
- (d) Describe top yeast & bottom yeast.
- (e) What do you mean by syngas fermentation?
- (f) Write three BIOS factors necessary for yeast
growth.

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- (g) Discuss denatured alcohol.
- (h) What do you mean by proof spirit?
- (i) What is E-number?
- (j) Define fusel oil.
- (k) Give the name of some by products produced during alcoholic fermentation.
- (l) Define Encillium process.
- (m) What do you mean by chemostat?
- (n) Define single cell protein with one example.

SECTION-B

Attempt **any five** questions from this sections. (5×10=50)

2. Describe various yeast strains used in breweries. What are the various parameters which affect the yeast growth?
3. What do you understand by biostill fermentation? Describe in brief with examples.
4. Describe the importance of aeration and agitation in alcohol fermentation.

5. Define Crabtree Effect in detail. How it affects alcohol production?
6. Discuss the criteria for selecting the microorganisms for industrial production?
7. Describe advantages, disadvantages of using alcohol as biofuel.
8. Define Fermentation. State its various applications.
9. Describe the procedure of estimation of specific gravity of beer.

SECTION-C

Attempt **any two** questions from this section. (15×2=30)

10. What are the various raw materials used for ethanol production? Discuss the production process of ethanol from molasses with a flow diagram.
11. Write a detailed note on thermal gasification of biomass.
12. Write an essay on "Food Vs Fuel".

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