

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

Paper ID : 154668

Roll No.

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B.TECH.

Theory Examination (Semester-VI) 2015-16

BIOFUELS & ALCOHOL TECHNOLOGY

Time : 3 Hours

Max. Marks : 100

Section-A

Q.1. Attempt all parts. All parts carry equal marks. Write answer of each part in short. (2×10=20)

- (a) Discuss Turbidostat and chemostat.
- (b) Explain Encelium process.
- (c) Discuss Alcoholometry in brief.
- (d) What is "proof" in alcohol industry?
- (e) Define the diastatic power of the malt.
- (f) Why corn kernels are steeped?

- (g) Give the name of the enzymes used in saccharification process and also mention condition of temperature and pH for the same.
- (h) Discuss the formation of the beerstone in a fermenter.
- (i) Fermentation is an anaerobic or aerobic process and why?
- (j) What is the different yeast strains used in alcohol industry?

Q.2. Attempt any five parts. All parts carry equal marks:
(5×10=50)

- (a) Explain batch fermentation in detail.
- (b) Describe syngas fermentation.
- (c) Give a detailed explanation of grain dry milling for alcohol production.
- (d) Describe single cell protein.
- (e) Discuss thermal gasification.

- (f) Explain fusel oil separation with labeled diagram.
- (g) Elucidate the steps of the wet milling involved in alcohol production.
- (h) Which parameters are considered for distillery quality control ?

Section-C

Note: Attempt any two questions from this section.

(2×15=30)

- Q.3. Give a vivid explanation of Biostil fermentation.
- Q.4. Discuss in detail stress factors encountered in the yeast cell growth.
- Q.5. Describe baker's yeast production.