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B. TECH
(SEM-V) THEORY EXAMINATION 2020-21
BIOFUELS & ALCOHOL TECHNOLOGY

Time: 3 Hours**Total Marks: 100****Note: 1.** Attempt all Sections. If require any missing data; then choose suitably.**SECTION A****1. Attempt all questions in brief.****2 x 10 = 20**

Qno.	Question	Marks	CO
a.	Define Alcohol technology.	2	
b.	Name the major alcoholic raw materials with one example each.	2	
c.	What do you understand by incineration?	2	
d.	Define Bio still fermentation.	2	
e.	Discuss the advantage of lignocelluloses as raw materials for ethanol production.	2	
f.	Define Batch fermentation and continuous fermentation.	2	
g.	Define syngas fermentation.	2	
h.	What are hops?	2	
i.	Define ale beer.	2	
j.	Name some byproducts of alcoholic fermentation.	2	

SECTION B**2. Attempt any three of the following:**

Qno.	Question	Marks	CO
a.	Briefly explain alcohol distillation. Discuss the parameters which affect alcoholic fermentations.	10	
b.	What do you understand by use of cellulosic feed stocks for alcohol production? What are the two methods of producing ethanol from cellulosic feed stocks?	10	
c.	Discuss Bio still fermentation in detail.	10	
d.	What is the difference between fermentation and anaerobic respiration? Comment upon how alcoholic fermentation is the most efficient process for producing ATP?	10	
e.	Discuss the management of fermentation in the production of alcohol?	10	

SECTION C**3. Attempt any one part of the following:**

Qno.	Question	Marks	CO
a.	Discuss the wet milling process of alcohol production from grain.	10	
b.	Discuss the study of yeast production as single cell protein.	10	

4. Attempt any one part of the following:

Qno.	Question	Marks	CO
a.	Discuss Crabtree effect in detail. How it affects alcoholic production?	10	
b.	Write down the storage & handling process of raw materials used in alcohol industry.	10	



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5. Attempt any one part of the following:

Qno.	Question	Marks	CO
a.	Discuss batch and continuous mode of operation for fermentative production of alcohol?	10	
b.	What do you understand by E number? Explain Gasohol production.	10	its

6. Attempt any one part of the following:

Qno.	Question	Marks	CO
a.	Explain thermal gasification of biomass in detail. Discuss the advantages and disadvantages of biomass gasification.	10	
b.	Discuss the parameters which affect alcoholic fermentations.	10	

7. Attempt any one part of the following:

Qno.	Question	Marks	CO
a.	Comment upon "Food Vs Fuel".	10	
b.	Describe the importance of aeration and agitation in alcoholic fermentation.	10	