

Q-3	Attempt all questions	(14)
a.	Write a note on (a) Saponification value (b) Acid value (c) Iodine value.	07
b.	Write a short note on Industrial organic synthesis of Ethyl acetate and Phenol.	07
Q-4	Attempt all questions	(14)
a.	Write a note on Distillation unit operation.	07
b.	What is Nitration unit process? Explain it with some examples.	07
Q-5	Attempt all questions	(14)
a.	Write a note on sulphonation unit process.	08
b.	Mol. Wt. of unsaturated fat is 956 gm/moles and required moles of iodine formation are 4. Calculate the iodine value for the same.	03
c.	Mol wt. of Triglyceride derivative is 1451 gm/moles and 3 moles of base (KOH) required for saponification. Calculate the saponification value for the same.	03
Q-6	Attempt all questions	(14)
a.	Discuss any two method for industrial production of hydrogen.	07
b.	Discuss about commercial production of carbon dioxide and oxygen.	07
Q-7	Attempt all questions	(14)
a.	Write a note on the manufacturing process of methyl anthranilate, methyl salicylate and ester of benzyl alcohol.	07
b.	What are the uses of carbon dioxide, nitrogen and oxygen?	07
Q-8	Attempt all questions	(14)
a.	Explain industrial manufacturing process of organic synthesis of acetic acid.	07
b.	What is Petrochemical? Discuss the manufacturing process of Acetone and Propenone.	07

