VITHALBHAI PATEL & RAJRATNA P.T. PATEL SCIENCE COLLEGE
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T.Y. B.Sc. SEM: V | INTERNAL TEST | DATE: 03th Oct. 2018
SUB: INDUSTRIAL CHEMISTRY | TIME: 10:00 am to 12:00 pm
SUB CODE: US05CICV03 | TOTAL MARKS: 50

Q1 MCQ. [08]

1. Which of the following treatment used for removal of sulphur from fuels?
   (a) Sulphuric acid (b) Dewaxing (c) Hydrofining (d) Alkali washing
2. The highest carbon atom present in the crude oil is
   (a) C_{90} (b) C_{75} (c) C_{70} (d) C_{80}
3. In low pressure synthesis for production of methanol from synthesis Gas_____ catalyst is used.
   (a) Zinc-Chromium oxide (b) copper based (c) silica (d) alumina
4. For production of HCN from methane_____ catalyst is used.
   (a) pt- Rhodium alloy (b) copper based (c) silica (d) alumina
5. _____ act as catalyst leading carbonium ion in the process of ethanol by liquid phase hydration of ethylene.
   (a) H2SO4 (b) HCL (c) HNO3 (d) All of these.
6. In the production of ethanol by direct hydration of ethylene, water to ethylene mole ratio is _____
   (a) 0.6 to 0.7 (b) 1to 2 (c) 10 to 12 (d) 3 to 6
7 _____ Is the ideal structure for rubber production.
   (a) Butadiene (b) butane (c) pentadine (d) none of these
8 The catalyst used for mfg. of isobutene is Al_2O_3 & $AlCl_3$ precoted with_____
   (a) HCL (b) Na_2CO_3 (c) Toluene (d) xylene.

Q2 Answer the following in short.(Attempt Five, each two marks) [10]

1.Explain signification of water removal from crude oil
2. Write detail of carbide theory of petroleum formation
3. Write a short note on properties & uses of Methanol.
4.Give equation and flow diagram of HCN
5. Mfg of Acetic acid
6. Mfg of glycerine by Acrolein route
7. Write composition% , Form, General application of Silica alumina
8. What are the limitation of molecular sieve as catalyst?

Q3. Explain Theory of petroleum. [08]

OR

Q3. Girbotol process of desulfurification. [08]

Q4. Out line that how are the important petro-chemicals obtained from methane [08]

OR

Q4. With the help of flow diagram explain the manufacturing of CS2. [08]

Q5. With the help of flow diagram explain manufacture and use of ethylene glycol from ethylene oxide. [08]

OR

Q5. With the help of flow diagram explain manufacture and use of styrene from benzene. [08]

Q6. Describe manufacturing method of Butadiene from Butane. [08]

OR

Q6. Describe the method of production of BTX(Benzene,Toluene,Xylene). [08]