# V. P. \& R. P. T. P. Science College 

B.Sc. (Fifth Semester)

Thursday $3^{\text {rd }}$ October, 2013

## Subject code: US05CICV03 (Technology of Petroleum and Petroleum Products) Industrial Chemistry(Vocational)

Time: 03:30 am to $05: 00 \mathrm{pm}$
Total Marks: 30

Q-1 Select right option from given in the following questions.
1 Girbotol process is used in crude oil for removal of $\qquad$
(a) Water
(b) Salts
(c) Sulphur
(d) Nitrogen

II Demulsification process is used in crude oil for removal of $\qquad$
(a) Water
(b) Salts
(c) Sulphur
(d) Nitrogen

III For the removal of unreacted ammonia $\qquad$ is used as scrubbing agent in the production of HCN .
(a) $\mathrm{H}_{2} \mathrm{SO}_{4}$
(b) Water
(c) Sodium carbonate
(d) All of these

IV Nitromethane is obtained from methane by $\qquad$ process.
(a) Nitration
(b) Oxidation
(c) Sulphonation
(d) Reduction

V The raw materials for mfg. vinyl acetate are $\qquad$ .
(a) Acetylene / Acetic acid
(b) Benzene / ethylene
(c) Acetylene / ethylene
(d) Nitro benzene/ methane

VI The raw materials for mfg. styrene are $\qquad$ -
(a) Acetylene / Acetic acid
(b) Benzene / ethylene
(c) Acetylene / ethylene
(d) Nitro benzene/ methane

## Q-2 Answer any three of the following:

1 Write detail of carbide theory of petroleum formation.
II Name method used of demulsification of crude oil.
III Explain the production of methanol by high pressure \& low pressure synthesis from Synthesis gas.
IV Write a short note on properties \& uses of HCN .
$V$ Give the outline of chemical obtained from $\mathrm{C}_{2}$ (ethane) fraction?
VI Write properties and uses of acrylonitrile.
Q-3 Explain Theory of petroleum formation.
OR
Q-3 Explain Demulsification \& desalting process of crude oil.
Q-4 With the help of flow diagram explain the manufacturing of HCN.


OR
Q-4 Give an outline how important petrochemicals are obtained from methane.
Q-5 With the help of flow diagram explain manufacture and uses of styrene.
OR
Q-5 Describe the process of manufacture of acrylonitrile

ALL THE BEST

