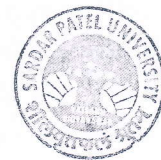


[71]

No. of Printed Pages : 2

SARDAR PATEL UNIVERSITY
T.Y.B.Sc. Industrial Chemistry SEMESTER – V
EXAMINATION -2025
Petroleum and Petroleum Products
SUB CODE: US05CICH52

SEAT No. _____



DATE: 06/10/2025
 DAY: Monday

TIME: 10.00 AM TO 1.00 PM
 TOTAL MARKS: 70

Q. 1 Choose the correct answer.

[10]

- (1) Diesel oil fraction in the boiling range around _____ °C.
 (A) 250-320 (C) 50-100
 (B) 650-700 (D) 350-400
- (2) Which of the following treatment used for removal of sulphur from fuels?
 (A) Sulphuric acid (C) Hydrofining
 (B) Dewaxing (D) Alkali washing
- (3) Naphthenes are _____ compounds.
 (A) Saturated (C) Aromatic
 (B) Unsaturated (D) Saturated
- (4) Saybolt's viscometer is used for determination of _____.
 (A) kinematic viscosity (C) Acid value
 (B) Aniline point (D) Carbon content
- (5) Flash & fire point determine gives the information related to _____.
 (A) safety (C) % carbon
 (B) Viscosity (D) Fluidity
- (6) The catalyst used in manufacture of HCN is _____.
 (A) Ag (C) Au
 (B) Pt-Rhodium alloy (D) Cu
- (7) Which gas separated from CS₂ Production?
 (A) Cl₂ (C) O₂
 (B) H₂S (D) H₂
- (8) _____ is used in manufacture for unsaturated polyester manufacture.
 (A) Maleic anhydride (C) CS₂
 (B) HCN (D) H₂O₂
- (9) Major uses of LABS is in the field of _____.
 (A) Detergent (C) Pesticides
 (B) Food (D) Plastics
- (10) Manufacturing of butane to butadiene the requisite steam to butane ratio is _____.
 (A) 11:1 (C) 4:5
 (B) 9:8 (D) 10:15



(1)

Q.2 Answer the following.(attempt ten)

[20]

- (1) Explain distillation of crude oil in short.
- (2) Explain importance of petroleum refining before separation.
- (3) Explain signification of water removal from crude oil.
- (4) Give the separated product by C8 fraction.
- (5) What are the different chemicals derive from ethane-ethylene fraction.
- (6) What are the different chemicals derive from propane-propylene fraction.
- (7) What are the different chemicals derive from C4 fraction.
- (8) Write a use of ethyl benzene.
- (9) Explain product obtain from methane.
- (10) Explain regeneration of catalyst, production of Butadiene.
- (11) Explain liquid phase hydration of ethylene.
- (12) Write the reaction condition production of propionaldehyde.

Q.3 (A) Construction & working of bubble cap tray.

(B) Distillation & refining of light petroleum products.

OR

Q.3 (A) Explain Theory of petroleum.

(b) Describe demulsification and desalting of crude oil.

Q.4 (A) Explain the hypersorber methods of ethylene separation from cracker gas.

(B) Write a note on the Udex method for separation of aromatics.

OR

Q.4 (A) Explain low temperature separation of C₂ fraction.

(B) Explain process with flow diagram removal of ISO-butane from C4-Fraction

Q.5 (A) Manufacture of isopropyl benzene.

(B) Explain Manufacture of ethyl benzene.

Q. 5 (A) Explain process of Manufacture of CS₂.

(B) Manufacture of phthalic anhydride.

Q. 6 (A) Production process of Vinyl acetate.

(B) Explain the manufacturing process of Phenol.

Q. 6 (A) Give the Production process of LABS.

(B) Write the manufacturing process of Butadiene.



————— X —————

(2)