

SEAT No. _____

No. of Printed Pages: 2

[115]



SARDAR PATEL UNIVERSITY
B.Sc. (SEMESTER-I) EXTERNAL EXAMINATION
INDUSTRIAL CHEMISTRY VOCATIONAL
US01CICV51: (Industrial Aspect Of Chemistry)
Monday, 14th February- 2022

Time: 3:00 P.M. To 5:00 P.M.

Total Marks: 70

Note: Figures to the right indicate full marks.

Q.1 Answer the given multiple choice questions. (All are compulsory) [10]

1. The highest carbon atom present in the crude oil is _____.
(a) C₇₅ (b) C₇₀ (c) C₈₀ (d) C₉₀
2. Which of the following fraction is used for water proofing of roofs and road making?
(a) Grease (b) Asphalt (c) Gasoline (d) Diesel
3. Girbotol process is used in crude oil to remove _____.
(a) Salt (b) Sulphur (c) Water (d) Amines
4. _____ is also known as artificial silk.
(a) Rayon (b) Nylon (c) Acrylic (d) Polyester
5. Which of the following polysaccharides stored in plants?
(a) Starch (b) Glycogen (c) Dextrin (d) None of these
6. Which of the following gives blue colour with iodine?
(a) Cellulose (b) Celluloid (c) α -amylose (d) Starch
7. _____ metal present in cuprite ore.
(a) Cu (b) K (c) Ag (d) Zn
8. Following is an example of Oxide ores.
(a) Zinc blend (b) Dolomite (c) Gypsum (d) Haematite
9. _____ is used as a main raw material for the manufacturing of plaster of paris.
(a) Iron oxide (b) Gypsum (c) Magnesium oxide (d) Alumina
10. Which of the following is a neutral refractory?
(a) Graphite (b) Silica (c) Magnesia (d) Dolomite



Q.2 Are the following statements TRUE or FALSE? (All are compulsory) [08]

1. In liquid phase thermal cracking heavy oil or gas oil stock is cracked at 475-530 °C temperature.
2. Petroleum ether is used as a lubricant.
3. Ethylene chlorohydrin is produced by the reaction of ethylene and hydrogen chloride gas.
4. Complete hydrolysis of cellulose gives D-fructose.
5. The principal ore of aluminium is bauxite.
6. Ferrous metallurgy is concerned with iron and steel and the alloys of iron and steel.
7. Fat lime is suitable for making mortars.
8. Natural cement is made by calcining a naturally occurring argillaceous limestone.

[13]

[P.T.O.]

Q.3 Answer the following short questions (Attempt any 10 out of 12)

[20]

1. Define the term petroleum.
2. Enlist the steps for refining of crude oil.
3. Enlist the petrochemicals which are derived from methane.
4. Write applications of cellulose nitrate.
5. Give the uses of carbon and zeolites.
6. Write various properties of starch.
7. What is mean by metallurgical slag ?
8. Define the term "Flux"
9. Write physical properties of metal.
10. Give the classification of refractories.
11. Write physical properties of glass.
12. Enlist various types of cement.



Q.4 Answer the following Long questions (Attempt any 4 Out of 8)

[32]

1. What is cracking? Write a note on catalytic cracking.
2. Discuss about the refining of crude oil in detail.
3. Write a short note on (i) Mica (ii) Silicon dioxide
4. Write preparation, properties and uses of Starch.
5. Explain in details about the classification of Ores.
6. Discuss in detail about types of alloys and purpose of making alloys.
7. What are the properties of glass? Discuss various types of glass in details.
8. Discuss the classification of engineering materials.

————— X —————

[2]

Page 2 of 2