

Seat No.: _____



No. of Printed Pages: 2

[31]

SARDAR PATEL UNIVERSITY

Bachelor of Science (Semester 1) Examination - 2022

US01CICV21: Industrial Aspect Of Chemistry

Date: 10th December 2022, Saturday

Time: 02:00 PM to 05:00 PM

Total: 70 Marks

NOTE: Figure to the right indicate full marks of the questions.

Q-1 Multiple Choice Questions

(10)

1. Which of following is the main constituent of coal gas?
 - A. Methane
 - B. CO
 - C. H₂
 - D. O₂
2. Hydrogen sulfide is removed from coal gas by reacting it with...
 - A. NaOH
 - B. Fe₂O₃
 - C. H₂O
 - D. NH₃
3. Which of this is not a primary fuel?
 - A. Peat
 - B. Natural gas
 - C. Charcoal
 - D. Coal
4. Complete hydrolysis of cellulose gives.....
 - A. D- fructose
 - B. D- glucose
 - C. D- ribose
 - D. L-glucose
5. Which of the following is insensitive to moisture?
 - A. Cellobiose
 - B. Cuprasilk
 - C. Acetate silk
 - D. Viscose silk
6. When Cellulose is treated with acetic anhydride and acetic acid in the presence of H₂SO₄ it produces....
 - A. Cupra silk
 - B. Acetate silk
 - C. Cellophane
 - D. Cellobiose
7. Which of following are very good conductor of heat and electricity?
 - A. Metalloids
 - B. Metals
 - C. Non-metal
 - D. All of these

8. Sources of elements are:
 - A. Atmosphere
 - B. Oceans
 - C. Earth crust only
 - D. All of these
9. Which of the following is neutral refractory:
 - A. Graphite
 - B. Dolomite
 - C. Silica
 - D. Magnesite
10. The main constituent of glass is:
 - A. SiO₂
 - B. CaO
 - C. Na
 - D. Al₂O₃

Q-2 Short Answer Question (Attempt TEN out of TWELVE)

(20)

1. Define term Natural gas, its chemical constitution.
2. Enlist the steps for refining of crude oil.
3. Define term thermal cracking of crude oil.
4. Enlist an application of Starch.
5. Enlist various processes for paper manufacturing.
6. How the sorbitol is prepared?
7. Define term "Slag".
8. Explain steps of purification of Bauxite ore by serpeck's process.
9. Enlist various types of furnaces.
10. Define term "Engineering materials".
11. What mean by cast iron.
12. Enlist various properties of Glass.

Q-3 Write a note on Liquefied petroleum gas (LPG) & Refining of gasoline. (10)
OR

Write a note on Thermal cracking & Fischer-Tropsch method. (10)

Q-4 Write a note on Important chemicals derived from cellulose and starch. (10)
OR

Write a note on Alumina & Silica. (10)

Q-5 Write a note on Alloys & Secondary metals. (10)
OR

Write a note on Drying & Calcining. (10)

Q-6 Write a note on Brasses & Manufacture of whitewares. (10)
OR

Write a note on Classification of engineering materials & Carbon steels. (10)