

(20 & A-13) Seat No.: _____

No. Of Printed Pages: 2

Sardar Patel University
B.Sc - FIRST SEMESTER EXAMINATION
November-2016

Date & Day: 15-11-2016, Tuesday

Time: 10:00^{am} to 12:00^{noon}

Industrial Chemistry Vocational
Course: US01CICV01
(Industrial Aspect Of Chemistry)

Notes: Figures to the right indicate full marks.

Total marks: 70

Q.1 Answer the following MCQs (All are compulsory)

(10)

1. What is the average % of carbon in petroleum crude?
A. 84-86
B. 15-20
C. 25-35
D. 50-60
2. The general formula of paraffin is?
A. C_nH_{2n+2}
B. C_nH_{2n-2}
C. C_nH_{2n}
D. C_nH_{2n-1}
3. Which of following is the main constituent of coal gas?
A. CO
B. Methane
C. H_2
D. O_2
4. Hydrogen sulfide is removed from coal gas by reacting it with...
A. Fe_2O_3
B. NaOH
C. H_2O
D. NH_3
5. Pyroxylin is used in the manufacturing of
A. Celluloid
B. Cupra silk
C. Explosive
D. Lacquers
6. Which of the following gives blue colour with iodine?
A. β - amylase
B. Cellulose
C. Celluloid
D. α -amylase
7. Which of the following is a reserve carbohydrate in plants?
A. Glycogen
B. Dextrins
C. Inulin
D. Starch
8. What is the molecular formula of benitoite?
A. $BaTi(SiO_3)_4$
B. $BaTi(SiO_3)$
C. $Ba(SiO_3)_4$
D. $BaTi(SiO_3)_3$
9. Which asbestos is white in colour?
A. Crocidolite
B. Tremolite
C. Actinolite
D. Chrysotile
10. What is the glass transition temperature pure SiO_2 ?
A. 1610K
B. 1500K
C. 1636K
D. 1600K

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(P.T.O.)

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Q.2 Answer the following short questions. (ANY TEN)

(20)

1. Define term Reforming.
2. Enlist characteristics of an ideal gasoline.
3. Outline the petrochemicals which are derived from methane.
4. What are products of carbonization?
5. Difference between coal and coke.
6. Write for low temperature carbonization.
7. Give the structure of α -Amylose
8. Write the uses of starch.
9. Define term fermentation.
10. Write a properties of carbon.
11. Enlist applications of carbon.
12. What are asbestoses?

Q.3 Discuss the Refining of crude oil in detail.

(10)

OR

Q.3 Write notes on following.

(10)

1. Advantages of LPG.
2. Thermal Cracking.

Q.4 Write a notes on following:

(10)

- A. Classification of coal on basis of rank.
- B. Distillation of coal tar.

OR

Q.4

- A. Write the manufacturing process of coal gas.
- B. Explain proximate analysis in detail.

(05)

(05)

Q.5

- A. Write about structure, properties and uses of Cellulose and Starch.
- B. Write a note on manufacturing process of Pulp.

(05)

(05)

OR

Q.5 Write the preparation, properties & uses of the following.

(10)

- A. Dextrin
- B. Glycogen

Q.6 Write short notes on Clay and Silicate.

(10)

OR

Q.6 Write structure, properties, occurrence and preparation of Aluminium oxide.

(10)

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