

SEAT No. \_\_\_\_\_

[37]

No. of Printed Pages : 2



**SARDAR PATEL UNIVERSITY**

T.Y. B.Sc. Industrial Chemistry SEMESTER – V

EXAMINATION -2022

Chemical Process Industries

SUB CODE: US05CICH23

DATE: 12/11/2022

TIME: 10.00 AM TO 01.00 PM

DAY: Saturday

TOTAL MARKS: 70

Q. 1 Choose the correct answer.

[10]

- (1) Ammonia Synthesis gas is pass through a filter to remove.
- (A) Compression oil (C) H<sub>2</sub>S  
(B) N<sub>2</sub> (D) None of these
- (2) After blending iodized salt will contain 0.01% of \_\_\_\_\_
- (A) Sodium thiosulfate (C) Potassium Iodide  
(B) Sodium carbamate (D) None of these
- (3) Which inorganic Chemicals cause in reduction in Ozone layer?
- (A) Iodine (C) Chlorine  
(B) Fluorocarbon (D) Methane
- (4) Caustic soda has chemical formula \_\_\_\_\_
- (A) Na<sub>2</sub>CO<sub>3</sub> (C) NaCl  
(B) NaHCO<sub>3</sub> (D) NaOH
- (5) The Soda ash is manufactured by \_\_\_\_\_ process.
- (A) Castner-kelne (C) Solvay's ammonia  
(B) Recovery process (D) Centrifuge process
- (6) NaOCl is Strong \_\_\_\_\_ agent
- (A) fuming (C) Bleaching  
(B) Reducing (D) blending
- (7) Electric furnace is mainly preferred as it can give high temperature as \_\_\_\_\_ °C
- (A) 100 (C) 4100  
(B) 1000 (D) 800
- (8) Electro thermal industry use electricity as a source of \_\_\_\_\_
- (A) Light (C) Transformation  
(B) Heat (D) Radiation
- (9) Arsenic is removed from the crude phosphoric acid by the action of \_\_\_\_\_
- (A) CO<sub>2</sub> (C) NaCl  
(B) H<sub>2</sub>S (D) KOH
- (10) In triple-Superphosphate has \_\_\_\_\_ % Phosphoric acid.
- (A) 10 (C) 90  
(B) 17 (D) 62

C.P.T.O.)

- Q.2 Answer the following.(attempt ten) [20]**
- (1) Write the use of ammonia.
  - (2) Write action of Urea as Fertilizer.
  - (3) Give the use of Iodine.
  - (4) Give the application of Oxygen Gas.
  - (5) Write the different electric Cell use in manufacturing of NaOH.
  - (6) Write the use of Hydrogen gas.
  - (7) Explain Advantage of electric furnace.
  - (8) Give the source of magnesium material.
  - (9) Write the application of SIC.
  - (10) Enlist raw material require for manufacturing of superphosphate.
  - (11) Define: Insecticide, Fungicide.
  - (12) What is pesticide?
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- Q.3 (A) Write the Manufacturing process of Urea. [05]**  
**(B) Give the process of Calcium ammonium nitrate. [05]**
- OR**
- Q.3 (A) Write the process of ammonium Nitrate. [05]**  
**(B) Write the help of flow diagram explain the manufacturing of fluorocarbon. [05]**
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- Q.4 (A) Write the manufacturing process of NaOH by using Diaphragm Cell. [10]**
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- Q.4 (A) Explain Production of  $\text{Na}_2\text{CO}_3$  by Solvay Process. [10]**
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- Q.5 (A) Explain the Classification of electric furnace. [05]**  
**(B) Discusses the manufacturing process of synthetic graphite. [05]**
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- Q. 5 (A) Explain process of  $\text{H}_2\text{O}_2$  Production process. [05]**  
**(B) Give the production detail of  $\text{KMNO}_4$  [05]**
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- Q. 6 (A) Write the help of flow diagram explain the manufacturing of Triple superphosphate. [05]**  
**(B) Write the short note on Ammonium Phosphate. [05]**
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- Q. 6 (A) Explain Wet process of Phosphoric Acid. [05]**  
**(B) Write in detail about Pesticide. [05]**

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