

V.P. & R.P.T.P. Science College  
T.Y.B.Sc. Industrial Chemistry (Vocational)  
(Semester -V<sup>th</sup>)  
INTERNAL EXAMINATION  
30<sup>th</sup> September 2016, Friday  
Course No: US05CICV02  
(Heavy and fine Inorganic chemicals)



Total Marks: 25

Time: 11:00 to 12:30 pm

**Q.1: Answer the given multiple choice questions.** [3]

1. Arsenic is removed from the crude phosphoric acid by the action of?  
(a)  $\text{CO}_2$  (b)  $\text{H}_2\text{S}$  (c)  $\text{H}_2\text{O}$  (d)  $\text{Na}_2\text{CO}_3$
2. In NaCl manufacturing, at which concentration calcium sulfate completely precipitates out by solar evaporation?  
(a) 250Be (b) 200Be (c) 270Be (d) 13.50Be
3. At which temperature moist  $\text{NaHCO}_3$  calcined from the drum filter?  
(a)  $210^\circ\text{C}$  (b)  $220^\circ\text{C}$  (c)  $200^\circ\text{C}$  (d)  $180^\circ\text{C}$

**Q.2: Answer the following questions (any two):** [4]

1. Enlist the raw materials required for manufacture of superphosphate.
2. Define catalyst and give any two example of catalyst.
3. Write the uses of oxalic acid.

**Q.3: Answer the following questions:** [6]

With the help of flow diagram explain the manufacture of ammonia.

OR

With the help of flow diagram explain the manufacture of super phosphate.

**Q.4: Answer the following questions:** [6]

With the help of flow diagram explain the manufacture of iodine.

OR

Write a short note on titanium dioxide.

**Q.5: Answer the following questions:** [6]

With the help of flow diagram explain the manufacture of oxalic acid.

OR

Explain the leblanc process for manufacturing of soda ash.