

**Vitthalbhai Patel & Rajratna P. T. Patel Science College,  
Vallabh Vidyanagar  
B. Sc. (Semester-VI)  
Subject : INORGANIC CHEMISTRY (US06CCHE03)**

Date : 14-03-2018  
Day : Wednesday

Internal Test – March, 2018

Marks : 25

Time : 11.00 a.m. to 12.30 p.m.

**Note:** (i) All questions are to be attempted.  
(ii) Figures to the right indicate marks.

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**Q.1 Choose the correct option for the following :** [3]

- (i) Enzyme containing ..... metal is responsible for hydrolysis of peptide chain.  
(a) Zn (b) Fe (c) Mg (d) Mn
- (ii) A catalyst is a substance that ..... the rate of reaction but is not itself consumed.  
(a) decreases (b) stop (c) increases (d) delay
- (iii) The extraction of metal from its ore by a process involving melting is termed as .....  
(a) distillation (b) crystallization (c) fluxing (d) smelting

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

- (i) Give the structure of ATP and Porphyrin molecule.  
(ii) Give the four requirements of a successful catalytic process.  
(iii) Define calcination and roasting.

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

- [a] Give important role of metallic elements in bio-inorganic chemistry.  
[b] Write short on Vitamin B<sub>12</sub>.

OR

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

- [a] Write short note on Hemoglobin.  
[b] Give the brief account on Rubredoxin and Ferridoxin.



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

- [a] Describe Monsanto acetic acid synthesis.  
[b] Write notes on alkene polymerization.

OR

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

- [a] Discuss the Palladium catalysed C-C bond forming reactions.  
[b] Describe Wacker oxidation of alkenes.

**Q.5 Answer the following :**

**[6]**

- [a] Define concentration. Also write notes on Froth-flotation process.
- [b] Describe extraction of Copper by Bessemerisation process and give its uses.

**OR**

**Q.5 Answer the following :**

**[6]**

- [a] Discuss the Dutch process for manufacturing of White lead.
- [b] Describe the extraction of Nickel by Orford's process.

