



VITTHALBHAI PATEL & RAJRATNA P. T. PATEL SCIENCE COLLEGE
VALLABH VIDYANAGAR
INTERNAL TEST MARCH-2017
B. Sc. (Semester-VI)
Subject: Inorganic Chemistry (US06CCHE03)

Date: 08/03/2017

Day: Wednesday

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

Total Marks: 25

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

Q. 1 Answer the following multiple choice questions. [03]

1. The metalloenzyme cytochrome P-450 consists of which metal?.

(a) Cu (b) Fe (c) Ni (d) Zn

2. The reaction to be catalyzed must be_____.

(a) Kinetically favourable (b) Homogenous
(c) Thermodynamically favourable (d) Organic

3. Siderite is an ore of _____?

(a) Copper (b) Lead (c) Silver (d) Iron

Q. 2 Answer the following: (Any Two) [04]

1. What is regulatory action of metallic elements?
2. Give the four requirements of a successful catalytic process.
3. Define Calcination and Roasting.

Q. 3

a) Give a brief account on Vitamin B₁₂. [03]

b) Discuss the important role of metallic elements in biochemistry. [03]

OR

Q. 3

a) Give a brief account on Hemoglobin. [03]

b) Write short note on Hemerythrin. [03]



Q.4

- a) Write short note on ethanoic acid synthesis. [03]
- b) Explain catalytic cycle for hydroformylation of alkenes by cobalt carbonyl catalyst. [03]

OR

Q.4

- a) Give a brief account on Palladium catalyzed C-C bond forming reaction. [03]
- b) Discuss catalytic cracking and the interconversion of aromatics by Zeolite. [03]

Q.5

- a) Discuss the Dutch process for manufacturing of White Lead. [03]
- b) Describe the extraction of copper from matte by Bessemer process. [03]

OR

Q.5

- a) Describe the reactions involved during extraction of iron giving neat diagram of Blast furnace. [03]
- b) Give the names of principal types of furnaces used in extraction of metals. Describe the Reverberatory furnace. [03]

