

V.P. & R. P. T. P. SCIENCE COLLEGE, VALLABH VIDYANAGAR
B. Sc. (Semester - VI) Examination
12 March 2014, Wednesday
INORGANIC CHEMISTRY (US06CCHE03)

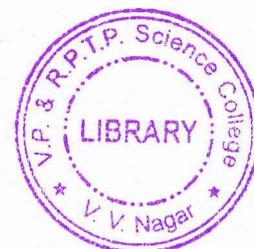
Time: 3.30 pm To 5.00 pm

Total Marks: 30

Q.1 Answer the following short questions (Any three):

(06)

- i. What is the regulatory action of metallic elements?
- ii. Give the structures of ATP and Prophyrin.
- iii. Give the four requirements of a successful catalytic process.
- iv. Define the terms: (a) Catalyst (b) Catalytic cycle
- v. Give the advantages of electrolysis carried out at lower temperature.
- vi. Give the name and formulae of chief ores of copper.



Q.2 a) Give a brief account on important role of metallic elements in biochemistry.

(04)

b) Describe the general structure and functions of chlorophyll.

(04)

OR

Q.2 a) What are the functions of hemoglobin and myoglobin? What are the principle similarities and differences in their structures?

(04)

b) What are metalloenzymes? Give the brief account on zinc metalloenzymes.

(04)

Q.3 a) Give an account on Monsanto acetic acid synthesis.

(04)

b) Describe the alkene metathesis.

(04)

OR

Q.3 a) Write a note on homogenous catalysis.

(04)

b) Discuss the interconversion of aromatics using zeolites.

(04)

Q.4 a) Discuss the Orford process for extraction of Nickel.

(04)

b) Write note on:

(04)

- (i) Froth flotation process
- (ii) Electrolytic refining process

OR

Q.4 a) Discuss the Dutch process for the manufacturing of White Lead.

(04)

b) Describe the manufacturing of cast iron.

(04)

BEST OF LUCK