

B.N. Bandodkar College of Science, Thane
S.Y.B.Sc - Second Term End Examination MARCH 2012

Chemistry

Paper-II

Duration 2 hrs

Max Marks-60

- N.B. :** 1) All questions are compulsory
2) Figures to the right indicate full marks.
3) Use of log tables/non-programmable calculator is allowed.

Q. 1	A	a. How will you classify metal carbonyls? Give examples.	2
		OR	
		a. Explain base on the basis of Lowry – Bronsted theory.	2
		b. Explain oxidation state of group 15 elements.	2
		c. Explain conductivity of group 16 elements.	1
	B		
		a. Give the electronic configuration of group 17 elements.	2
		OR	
		a. Name the elements of group 18.	2
		b. What are myoglobin?	1
		OR	
		b. Give one method of preparation for Xenontetrafluoride.	1
		c. What are pseudo halogens?	1
		d. Explain most of the noble gases have ns^2np^6 as outer electronic configuration.	1
	C	a. Comment on economic losses due to corrosion.	2
		OR	
		a. Explain the oxidative corrosion.	2
		b. Define the environment protection act.	2
		c. What is water pollution?	1

- Q 2 A Classify organometallic compounds on the basis of nature of metal-carbon bond. 3
- B Attempt ANY THREE questions from the following. 12
- a. Explain HSAB concept.
- b. Give electronic configuration of last four elements of group 15.
- c. Write a note on hydrides of group 16 elements.
- d. Explain Usanowich concept.
- e. Explain eighteen electron rule.
- Q3 A Discuss the trends in periodic properties of halogens with respect to the 3
 ionization energy .
- B Attempt ANY THREE questions from the following. 12
- a. Give the preparation and discuss their structure of XenonOxytetrafluoride.
- b. Explain the thiocyanogen of pseudo halogens.
- c. Give an account of preparation and discuss their structure of Xenonhexafluoride.
- d. Discuss the trends in physical properties of group 17 elements..
- e. Write a note on metalloporphyrins..
- Q 4 A Explain electrochemical theory of corrosion. 3
- Attempt any three from the following. 12
- a. Give an account of wet corrosion.
- b. Discuss the sources of water pollution.
- c. Explain the various effects of soil pollution.
- d. Write a note on cathodic protection method.
- e. Explain the role of an individual in overcoming crises of pollution.
