

APPLIED CHEMISTRY-II
2nd Exam/2254/2451/5424/Common/May'16

Duration: 3 hrs

M. Marks=75

SECTION A

Q. 1 Fill in the blanks

1x10=10

- a. Important ore of iron is_____.
- b. Sulphide ores are concentrated by _____process.
- c. The process of depositing Zinc on iron is called_____
- d. Producer gas is a mixture of CO & _____.
- e. Percentage of fixed carbon can be determined by _____ analysis.
- f. A good lubricant should have _____ flash point.
- g. In a paint, gypsum is used as_____
- h. Fire clay bricks are _____ in nature.
- i. Polythene is a _____ polymer.
- j. Carbon monoxide is _____ toxic than CO₂.

Q.2 State True or False

1x5=5

- a. Percentage of carbon is more in wrought iron than steel.
- b. Solder is an example of ferrous alloy.
- c. Graphite is an example of natural refractory.
- d. Rubber is a natural polymer.
- e. The intensity of noise is measured in decibel.

SECTION B

Q.2 Attempt any SIX questions:

6x5=30

- (i) Explain Froth floatation process for the concentration of sulphide ore.
- (ii) Define the terms gangue, flux, slag, ore and mineral.
- (iii) What are the factors which influence the rate of corrosion?
- (iv) What is water gas? Give its composition and uses.
- (v) Define greases. Give applications of greases.
- (vi) What are the characteristics of a good paint?
- (vii) Differentiate between thermoplastics and thermosetting plastics.
- (viii) Explain addition and condensation polymers.
- (ix) What is air pollution? Give the sources of water pollution.

SECTION C

Q. 3 Attempt any FIVE questions:

5x6=30

- (i) What is an alloy? Describe the composition and uses of German silver and Nichrome.
- (ii) Write a short note on metal cladding and metal spraying.
- (iii) Describe classification of fuel.
- (iv) Define oiliness, saponification value, volatility, emulsification, cloud point and pour point.
- (v) What are refractories? Give characteristics of a good refractory material.
- (vi) Give the preparation and uses of Natural rubber and PVC.
- (vii) Describe primary and secondary pollutants, biodegradable and non Biodegradable pollutants.
- (viii) Explain coal gas and Biogas.