

APPLIED CHEMISTRY

2nd/common/2254/5424/Nov'15

Duration: 3 Hrs

M.Marks=75

NOTE: Attempt all questions

SECTION- A

Q. 1(A) Fill in the blanks

10x1=10

- (i) The formula of copper pyrite is _____.
- (ii) Oxide ores are concentrated by _____ process.
- (iii) Slow and continuous decay of metal by mechanical force is known as _____.
- (iv) Water gas is a mixture of _____.
- (v) _____ number is used for rating diesel.
- (vi) Lubrication is the process of decreasing _____ in the machine.
- (vii) Pigment varnish is called _____.
- (viii) Natural rubber is a polymer of _____.
- (ix) Fibres are _____ than elastomers.
- (x) The major air pollutant is _____.

(B) State True or False

5x1=5

- (i) The metals are electropositive in nature.
- (ii) A good fuel has low moisture content..
- (iii) Grease is low viscous in nature.
- (iv) All macromolecules are polymers.
- (v) Acidic soil damages the crops.

SECTION-B

Q.2 Attempt any SIX questions

6x5=30

- (i) Explain smelting and calcinations.
- (ii) What is erosion? How it is different from corrosion?
- (iii) What are the characteristics of a good fuel?
- (iv) What are the functions of lubricants?
- (v) Name various constituents of paint. Explain functions of a drying oil and thinner.
- (vi) What do you understand by homopolymers and copolymers?
- (vii) What are polymers? Give its applications.
- (viii) What is water pollution? Give the sources of water pollution.
- (ix) Define corrosion? What is the cause of corrosion?

SECTION-C

Q. 3 Attempt any FIVE questions

5x6=30

- (i) Describe the composition and uses of Brass and Gun metal.
- (ii) Explain caustic Embrittlement and stress corrosion.
- (iii) What is producer gas? Give its composition and uses.
- (iv) Define fire point, flash point, emulsification, viscosity, cloud point and pour point.
- (v) What are refractories? Explain the types of refractories.
- (vi) Give the preparation and uses of Polythene and Teflon.
- (vii) Explain acid rain and global warming.
- (viii) Explain LPG and CNG.