# Engineering Chemistry (2014)

## Q1. Choose the correct answer from the four alternatives:

- (i) A and Z are the mass number and atomic number respectively of an atom. The number of neutrons present in it is:
  - (a) A

(b) Z

(c)A+Z

(d) A - Z

#### Ans.(d)

### (II) Concrete conclusion of Rutherford model is about

(a) nucleus

(b) orbit

(c) orbital

(d) sub-orbital

Ans.(a)

#### (lli) Isotopes differ in

- (a) atomic number
- (b) position in periodic table
- (c) number of protons
- (d) number of neutrons

Ans.(a)

## (lv) Full form of PVC is.

- (a) Poly Viscous Chloride (b) Poly Vinyl Chloride
- (c) Plastic Vision Colour (d) Polyster Vinyl Clearity
  Ans.(b)

(v) Repeat unit of natuyrla rubber is

(a) Isoprene

(b) Propylene

(d) Nylon

(c) Teflun Ans.(d)

(vi) Concept of vulcanization was given by

(a) CEAT

(b) Dunlop

(c) Goodyear

(d) Napier

Ans.(d)

(vii) Ozone is

- (a) Oxygen molecule
- (b) Hydrogen molecule
- (c) Nitrogen molecule

(d) Carbon dioxide

Ans.(a)

(viii) Which part of human body is affected by particulate compound?

(a) Hair

(b) Skin

(c) Lungs

(d) Bone

Ans.(c)

(ix) One Faraday is equal to

(a) 69500 coulombs

(b) 96500 coulombs

(c) 96500 watt

(d) 96500 ampere

Ans.(b)

Q2.(a) Write and explain Faraday's law of electrolysis.

Ans. Refers to chapter 2 Q. no. 13

Q2.(b) What is the significance of electrolysis in electroplating, electro-refining and electrotyping?

Ans.Refers to chapter 2 Q. no. 14

Q3.(a) Explain the term Alloy. State the purpose of alloying of metal with relevant examples.

Ans. Refers to chapter 3 Q. no. 3

Q3.(b) Describe the extraction of cast iron from its ores with reactions involved at different temperature zones.

Ans. Same as Q no 5(a) 2017

Q4.(a) What are the sources of air pollution? How it can be controlled?

Ans. Refers to chapter 5 Q. no. 3

Q4.(b) Explain and differentiate between electrovalent and covalent compounds with examples.

Ans. Refers to chapter 1 Q. no. 10

Q.5 Write short notes on any two of the following:

- (a) Water pollution
- (b) Biomedical waste and e-waste
- (c) Thermal insulating materials

Ans. (a)Refers to chapter 5 Q. no. 5

(b)Refers to chapter 5Q. no. 11(b) & 11(c)

(c)Refers to chapter 4 Q. no. 9(c)