

Zonal Education Office - Jaffna

Unit Exam – 03

Science

Grade –10

Time – 40 minutes

I) Under line the most suitable answer

01. Who put forward the planetary model of atom.
1. J.J.Thompsan 2. E.Rutherford 3. Chadwick 4. Nellbhor
02. ${}_{13}^{27}X$ Give the group and period of the given element
1. 3, 3 2. 3, IV 3. 4, III 4. III, 3
03. The number of neutron found in the isotope protium
1. 0 2. 1 3. 2 3. 3
04. Mention Chemical formula of chloride of X the chemical formula of oxide of X is X_2O_3
1. XCl 2. XCl_3 3. X_2Cl_3 4. X_3Cl
05. Which one is mentioned as sacrificing metal
1. Na 2. Fe 3. Al 4. Mg

(5x3=15 marks)

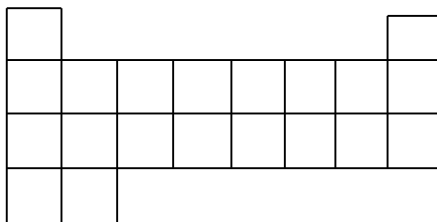
II) Mark Correct (✓) or Incorrect (X)

01. Cl_2O_7 is a strong base (.....)
02. Nitrogen is used as a filing gas in milk packets. (.....)
03. Ionization energy increases through period from top to bottom. (.....)
04. Sulphur is used for valganizing rabber. (.....)
05. Most of elements discovered recently are metals. (.....)

(5x3=15 marks)

Part – II

- 01) i) Features of some elements are given below. Mention the suitable elements in periodic table in the proper place. Use give English letters. (English letters did not denote the symbol of elements)



- A – Yellowish green gas.
- B - Gas found in high amount
- C – Elements used in preparing skin creams.
- D- Metalloid used to prepare solar cells.
- E – Non metal that conduct electricity and have allotrophs.
- F – Metal used to prepare Indigo dye. (6x2=12 marks)

ii) Chemical formula of the compound which is produced by the combination of A and F. (05 marks)

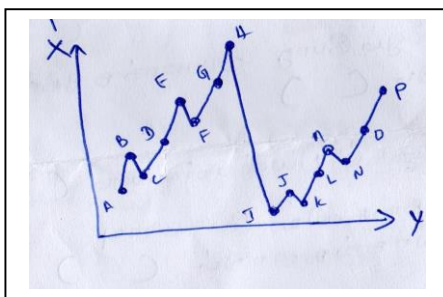
iii) Write down 2 non crystal form of allorophs of element E. (2x2=04 marks)

iv) Name metals ,
 Non metals
 and metalloid

(3x3=09 marks)

v) Draw electronic configuration of F. (05 marks)

02) The ionization energy pattern of period 2, 3 is shown in the graph given below



- i) Which are denoted by X,Y axis
 X -
 Y -
- (05 marks)

- ii). What is meant by 1st ionization energy? Mention the unit. (05 marks)
- iii) Write down the English letter which denotes the element with highest ionization energy in the graph? (05 marks)
- iv) Which group has less ionization energy ? Write down the letters belongs to this group. (05 marks)
- v) Reason out why a ionization energy changes through period. (05 marks)
- vi) Write down the English letter belongs to the groups (05 marks)
- vii) Write down chemical formula of the compound (05 marks)