Q15. Define Ionic Compounds? Give examples.

Ans: "Compunds that contains oppositely charged ions held together by ionic bonds are called ionic compounds"

Example: Sodium Chloride (NaCl)

Q16: Define Covalent Compounds? Give examples.

Ans: "Compounds formed by the sharing of electrons between different atoms are called covalent compounds"

Example: H2O, HCl, CH4 etc

SECTION "C"(DETAILED-ANSWER QUESTIONS) 18Mark

Note: Answer any THREE questions from this section. Eac question carries 06 Marks

Q17. Explain any five branches of chemistry.

Ans. Physical chemistry:

Is the branch of chemistry which deals with relationsh between composition and physical properties of matter wi the changes in them. It deals with the laws and principle governing the combination of atoms and molecules chemical reactions.

Organic Chemistry:

Organic chemistry is the branch of chemistry which deals wi hydrocarbons and their derivatives. Organic chemistry is t study of structure, properties, composition, reactions a preparation of carbon-containing compounds, which inclu hydrocarbons except oxides, carbonates, bicarbonates a cynites. The gasoline, plastics, detergents, dyes, fo additives, natural gas, and medicines are studied in t organic chemistry.

Inorganic Chemistry:

Inorganic chemistry is the branch of Chemistry which de with the study of all elements and their compound exc hydrocarbons. These compounds are generally obtained fr

nonliving organisms. It is applicable in all areas of chemical industry. Such as glass, cement, ceramics and metallurgy.

Biochemistry:

Biochemistry is the branch of Chemistry which deals with the compounds of living organisms. plants and animals and their metabolism and synthesis in the living body such as carbohydrates, proteins and fats. Biochemistry helps us to understand how living things obtain energy from food. It tells that how disorder or deficiency of these biomolecules causes diseases. This branch is useful in medicine, agriculture and food science.

Nuclear Chemistry:

Nuclear chemistry is the branch of Chemistry which deals with the radioactivity, nuclear processes and properties. Radioactive elements are widely used in medicine as diagnostic tools and as a means of treatment, especially for cancer, preservation of food and generation of electric power through nuclear power reactors.

18. Calculate the molecular mass of HNO_3

...olution:

Atomic mass of H = 1 a.m.u
Atomic mass of N = 14 a.m.u
Atomic mass of O = 16 a.m.u
Molecular mass = 1(At. Mass of H) +1(At. Mass of N) +3(At. Mass of O)

= 1 + 14 +3(16) = 1 + 14 + 48
= 63 a.m.u

If any element have number ... number of neutron... and atomic ...

BOARD OF INTERMEDIATE & SECONDARY EDUCATION, MIRPURKHAS, SINDH.

SECONDARY SCHOOL CERTIFICATE PART – I & II, (CLASS IX & X) ANNUAL EXAMINATION 2022

CHEMISTRY-I

TIME ALLOWED: 02 HOUR 35 MINUTES | MARKS: 36

SECTION – B

ENGLISH VERSION

NOTE: ANSWER ANY EIGHT (08) OF THE FOLLOWING QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS. 24

Q. No. 02: Define Chemistry and enlist the names of branches?

Q. No. 03: Define following terms with examples (a) Molecule (b) Mole (c) Element

Q. No. 04: What are Limitations of Bohr's atomic model?

Q. No. 05: How many protons, electrons and Neutrons are present in the followings

$$U_{92}^{235} \quad - \quad Cl_{17}^{37} \quad - \quad Fe_{52}^{56}$$

Q. No. 06: Determine the demarcation of periodic table into s, p, d & f blocks

Q. No. 07: The pressure of a sample of a gas is 3atm and volume is 5 liters if the pressure is reduced to 2atm, what will be the new volume

Q. No. 08: Convert the following units

a) $100\,C^{0}$ to K (b) $170\,K$ to C^{0}

Q. NO. 09: Balance the following equations

(i) $NH3 + O2 \longrightarrow No + H2o$

(ii) $KNo3 \longrightarrow KNO2 + O2$

(iii) $Ca + H2O \longrightarrow Ca(OH)2 + H2$

(iv) $Co + O2 \longrightarrow Co2$

Q.NO. 10: Differentiate the properties of polar and Non polar compounds

Q.NO. 11: Write names and symbols of Alkali metals.

Q.NO. 12: Why Ionic compounds are solid?

Q.NO. 13: Distinguish between periods and groups

SECTION – C

NOTE: ANSWER ANY TWO (02) OF THE FOLLOWING QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS. 12

Q. No. 14: Define Ionic bond and discuss formation of NaCl:

Q. No. 15: Define Evaporation in Liquids and explain factors affects evaporation.

Q. No. 16: Describe dry cell with diagram

URDU VERSION

حصہ دوم

24

نوٹ مندرجہ ذیل میں سے آٹھ (08) سوالات کے جوابات لکھیں۔ تمام سوالات کے نمبر مساوی ہیں۔

سوال نمبر 02: علم کیمیا کیا ہے؟ شاخوں کے نام تحریر کریں

سوال نمبر 03: مندرجہ ذیل کی تعریف بیان کریں۔ (الف) مالیکیول (ب) مول (ج) عنصر

سوال نمبر 04: بوہر کے ایٹمی نظریئے کی خاص کیفیات بیان کریں۔

سوال نمبر 05: مندرجہ ذیل میں کتنے پروٹان، الیکٹران اور نیوٹران موجود ہوتے ہیں۔

$$U_{92}^{235} \quad - \quad Cl_{17}^{37} \quad - \quad Fe_{52}^{56}$$

سوال نمبر 06: عناصر کی دوری جدول کی درجہ بندی s, p, d اور f بلاکس کے لحاظ سے بیان کریں۔

سوال نمبر 07: کسی سیلنڈر کے اندر ڈیلر گیس ہے۔ جس کا دباؤ 3atm ہے۔ اگر اس کا دباؤ 2atm کر دیا جائے تو نیا حجم معلوم کریں۔

سوال نمبر 08: مندرجہ ذیل کو تبدیل کریں۔

(a) $100\,C^{0}$ to K (b) $170\,K$ to C^{0}