

**General chemistry**  
**I Semester. 2020-2021 Years**  
(შუალედური გამოცდის ნიმუში)

**Question 1**

What is the relative molecular mass of ZnO and H<sub>2</sub>SO<sub>4</sub> ?

Select one:

- a. 58 and 87
- b. 37 and 28
- c. 81 and 98
- d. 64 and 98

**Question 2**

What is the mass of 2.5 mole Fe ?

Select one:

- a. 40
- b. 155
- c. 100
- d. 140

**Question 3**

How many molecules are there in a 5g sample of sulphuric acid (H<sub>2</sub>SO<sub>4</sub>)?

Select one:

- a.  $0.3 \times 10^{23}$
- b.  $5.2 \times 10^{23}$
- c.  $6.2 \times 10^{22}$
- d.  $0.2 \times 10^{24}$

**Question 4**

How many protons and neutrons are in atom of <sup>70</sup><sub>31</sub>Ga ?

Select one:

- a. 31 and 29;
- b. 31 and 39;
- c. 31 and 45
- d. 31 and 70;

**Question 5**

Give the group number and period number for elements <sub>20</sub>Ca, <sub>80</sub>Hg.

Select one:

- a. 4 period. Ia group, 5period IIb group;
- b. 4 period. IIa group, 6 period IIb group;
- c. 3 period. Ia group, 4period IIa group;
- d. 2 period. Ia group, 5period IVb group;

#### Question 6

Which of the following compounds are formed by covalent bond ?

Select one:

- a. H<sub>2</sub>O NaCl Cl<sub>2</sub>
- b. N<sub>2</sub> HCl H<sub>2</sub>
- c. KCl HBr CCl<sub>4</sub>
- d. H<sub>2</sub>S AlCl<sub>3</sub> LiCl

#### Question 7

Wich atoms are connected by non-polar covalent bond?

Select one:

- a. Br, Br;
- b. , Cl
- c. H, Cl;
- d. Mg, O;

#### Question 8

What type of hybridization is required at the central atom of the following molecules: CH<sub>4</sub>,

Select one:

- a. sp
- b. sp<sup>2</sup>
- c. sp<sup>3</sup>
- d. sp<sup>3</sup>d

#### Question 9

which row contains only acidic oxides:

Select one:

- a. K<sub>2</sub>O, SiO, SO<sub>3</sub>
- b. CuO, Na<sub>2</sub>O, NO
- c. CO, N<sub>2</sub>O, NO
- d. N<sub>2</sub>O<sub>3</sub>, P<sub>2</sub>O<sub>5</sub>, CO<sub>2</sub>

#### Question 10

which row contains only acids:

Select one:

- a.  $\text{HCl}, \text{NH}_3, \text{H}_2\text{CO}_3$
- b.  $\text{Cu}(\text{OH})\text{Cl}, \text{H}_2\text{SO}_2, \text{H}_2\text{SO}_3$
- c.  $\text{HCl}, \text{Al}(\text{OH})_2\text{Cl}, \text{NH}_2\text{OH}$
- d.  $\text{KCl}, \text{NaHSO}_4, \text{HNO}_3$

### Question 11

which row contains only sulfides :

Select one:

- a.  $\text{Na}_2\text{S}, \text{CuS}, \text{FeS}$
- b.  $\text{K}_2\text{SO}_3, \text{NaHSO}_3, \text{Al}_2(\text{SO}_3)_3$
- c.  $\text{ZnSO}_4, \text{KHSO}_4, \text{NaSO}_4$
- d.  $\text{K}_2\text{S}_2\text{O}_3, \text{Na}_2\text{S}_2\text{O}_3, \text{CaSO}_3$

### Question 12

The coordinate number of the central atom in the complex compound  $\text{K}_2[\text{PtCl}_4]$  is:

Select one:

- a. 4
- b. 6;
- c. +3;
- d. 3;