

**FSBEI HE TVER STATE MEDICAL UNIVERSITY MINISTRY OF
HEALTH OF RUSSIA**

**DEMONSTRATION TICKET
CHEMISTRY
(test control)**

In questions 1-50, choose one or more correct answers.

1. Determine which atom of the elements listed in the series in the ground state lacks one electron to complete the outer electron shell.

- 1) Na 2) S 3) F 4) Mg

2. Among the listed elements, select the element that exhibits an oxidation state of +1 in compounds.

- 1) Na 2) S 3) F 4) Mg

3. The ionic type of bonding is characteristic for

- 1) oxygen 3) carbon dioxide (IV)
2) water 4) sodium chloride

4. Which of the metals displaces iron from a solution of iron (II) sulfate?

- 1) Cu 2) Zn 3) Sn 4) Hg

5. Precipitation accompanies the interaction of ions

- 1) Ag^+ and PO_4^{3-} 3) H^+ and SO_4^{2-}
2) Ca^{2+} and Cl^- 4) Na^+ and S^{2-}

6. Hydrochloric acid reacts with

- 1) NaHCO_3 3) SiO_2
2) Hg 4) S

7. Select the oxides that do not react with water to form an acid.

- 1) P_2O_5 2) SO_2 3) SiO_2 4) CO 5) CO_2

9. The reaction is possible when interacting

- 1) KCl and I_2
2) NaBr and I_2
3) KBr and Cl_2
4) NaF and Cl_2

9. A substance with the formula $\text{Na}[\text{Al}(\text{OH})_4]$ is

- 1) an acid
- 2) a base
- 3) a salt
- 4) an oxide

10. Formic (methanoic) acid reacts with

- 1) sodium chloride
- 2) sodium hydrosulfate
- 3) ammoniacal silver oxide solution
- 4) nitrogen oxide (II)
- 5) ethanol

11. When ethylene reacts with water in the presence of a catalyst, it forms

- 1) an acid
- 2) an aldehyde
- 3) an alcohol
- 4) a simple ether

12. The reaction is impossible when interacting

- 1) propene and water
- 2) acetylene and water
- 3) ethanal and water
- 4) toluene and water

(and so on up to №50)