Assessment tools for conducting attestation in discipline «Fundamentals of protection against weapons of mass destruction»

for students of 2023 year of admission under the educational programme 33.05.01 Pharmacy, specialisation (profile) Pharmacy (Specialist's degree), form of study full-time for the 2025-2026 academic year

1.1. The current attestation includes the following types of tasks: testing, solving situational tasks, assessing the development of practical skills (competencies), interviewing on control questions, and preparing an essay.

1.1.1. Examples of test tasks

Verifiable indicators of competence achievement: YK-8.1.1, YK-8.2.1

- 1) To protect against which AOXV, an additional cartridge must be used in conjunction with a filter gas mask:
- a) hydrogen fluoride;
- b) phosgene;
- c) sulfur dioxide;
- d) sarin.
- 2) The purpose of chemical reconnaissance is:
- a) to detect chemically hazardous objects;
- b) to determine the chemical situation;
- c) to detect locations where chemical weapons are stored;
- d) to identify individuals affected by chemical agents or AOXV.
- 3) The smell of bitter almonds is characteristic of:
- a) sulfur mustard;
- b) nitrogen mustard;
- c) hydrocyanic acid;
- d) phosgene.
- 4) The observation posts are tasked with:
- a) sampling soil and vegetation;
- b) determining the type of chemical agent used;
- c) marking the boundaries of chemical contamination areas;
- d) establishing routes to bypass or avoid chemical contamination areas.
- 5) The most vulnerable part of a filter gas mask is:
- a) the gas mask box;
- b) the inhalation valve;
- c) the exhalation valve;
- d) the eyeglass assembly.
- 6) The following gas masks have a water intake device:
- a) GP-5M;
- b) GP-7;
- c) GP-7V;
- d) GP-5.
 - 7) Full special treatment is carried out in chemical contamination areas:
 - a) with fast-acting BTCHs, ACHs;
 - b) with slow-acting BTCHs, ACHs;
 - c) with persistent BTCHs, ACHs;
 - d) with unstable BTCHs, ACHs.

- 8) The smell of rotten fruit and decayed hay is characteristic of:
- a) sulfur mustard;
- b) nitrogen mustard;
- c) Lewisite;
- d) phosgene.
- 9) The military chemical reconnaissance device is designed to detect the following chemical warfare agents:
- a) chloroacetophenone;
- b) chloropicrin;
- c) hydrocyanic acid;
- d) carbon monoxide.
- 10) Chemical reconnaissance equipment is used to detect chemical agents and toxic chemicals in water and food:
- a) military chemical reconnaissance equipment (VCHR);
- b) automatic gas analyzer (GSA-13);
- c) medical and veterinary chemical reconnaissance equipment (PCHR-MV);
- d) semi-automatic chemical reconnaissance equipment (PPCHR).

1.1.2. Examples of tasks for assessing the development of practical skills (competencies)

Verifiable indicators of competence achievement: YK-8.2.1, YK-8.3.1, ПK-3.2.1, ПК-3.3.1

- 1. Assemble the VPKH device for determining neurotoxic substances.
- 2. Device of the DP-5A device
- 3. Rules for using a syringe-tube
- 4. Apply a blood-stopping tourniquet to the thigh.
- 5. Test the performance of a filter gas mask.

1.1.3. Examples of an essay

Verifiable indicators of competence achievement: YK-8.1.1

- 1. Promising medical personal protective equipment.
- 2. Modern devices for detecting toxic substances.
- 3. Promising means of stopping external bleeding.
- 4. Biological agents as a damaging factor of weapons of mass destruction.
- 5. Engineering protective structures.

1.1.4. Examples of questions for an interview

Verifiable indicators of competence achievement: YK-8.1.1, YK-8.2.1, IIK-3.2.1

- 1. Types of weapons of mass destruction.
- 2. Classification of chemical weapons indicators.
- 3. Purpose of the combined-arms filter gas mask.
- 4. Goals and objectives of chemical reconnaissance.
- 5. Tasks of reconnaissance patrol.

1.2. Assessment tools for students' independent work

The assessment of independent work includes the preparation of an essay.

1.2.1. Examples of an essay

Verifiable indicators of competence achievement: УК-8.1.1

Promising medical personal protective equipment.

- 2. Modern devices for detecting toxic substances.
- 3. Promising means of stopping external bleeding.
- 4. Biological agents as a damaging factor of weapons of mass destruction.
- 5. Engineering protective structures.

2. Assessment tools for conducting intermediate attestation in a discipline.

Intermediate attestation is carried out in the form of a credit.

The intermediate attestation includes the following types of tasks: testing.

2.1. Examples of test tasks

Verifiable indicators of competence achievement: УК-8.1.1, УК-8.2.1, ΠК-3.2.1

- 1) Choose one of the four answers. Devices for measuring the dose rate:
- a) DP-64;
- b) DP-70;
- c) DP-22V;
- d) DP-5A
- 2) Choose one of the four answers. The DP-5A radiometer-rentgenmeter is designed to measure:
- a) gamma and beta radiation;
- b) gamma and alpha radiation;
- c) gamma and neutron radiation;
- d) beta and alpha radiation.
- 3) Choose one of the four answers. The most vulnerable part of a filter gas mask is:
- a) the inhalation valve;
- b) the exhalation valve;
- c) the eyeglass assembly;
- d) the gas mask box.
- 4) Choose one of the four answers. To protect against which AOXV, an additional cartridge must be used in conjunction with a filter gas mask:
- a) chlorine;
- b) hydrogen sulfide;
- c) phosgene;
- d) ammonia.
- 5) Choose one of the four answers. The smell of rotten fruit and decayed hay is characteristic of:
- a) sulfur mustard;
- b) nitrogen mustard;
- c) Lewisite;
- d) phosgene.
- 6) Choose one of the four answers. The military chemical reconnaissance device is designed to detect the following chemical warfare agents:
- a) chloroacetophenone;
- b) chloropicrin;
- c) hydrocyanic acid;
- d) carbon monoxide.
- 7) Select three answers from six. By origin, hazards are classified into:
- a) physical;
- b) natural;
- c) technogenic;
- d) anthropogenic;
- e) chemical;
- f) biological
- 8) Choose three answers from six. Doses of ionizing radiation that do not lead to acute radiation damage, reduced ability to work, and do not aggravate concomitant diseases:
- a) single (single) 50 rad (0.5 Gy);
- b) single (single) 100 rad (1 Gy);
- c) monthly 100 rad (1 Gy);
- e) annual 300 rad (3 grams);
- f) annual 1000 rad (10 grams).

9) Establish the correspondence of poisons and their routes of entry into the body by selecting the corresponding position from the second column for each position given in the first column:

Poison	Mode of entry into the body
1. carbon monoxide	A. Inhalation route
2. acetic acid	B. Oral route
3. ammonia	
4. ethylene glycol	
5. methyl alcohol	
6. chlorine	

- 10) Set the sequence of actions when preparing the DP-5A device for operation. Write down the appropriate sequence of numbers.
- 1. Perform an external inspection for mechanical damage
- 2. Using the zero setting screw, bring the arrow of the measuring device to the zero position
- 3. Install or replace power supplies.
- 4. Turn on the device by turning the switch to the "Dir." (mode) position.
- 5. Remove the device from the packing case
- 6. Rotate the "Mode" knob to set the instrument needle to the "black triangle" (▼) mark.

The full fund of assessment tools for the discipline/practice is available in the VolgSMU Electronic Information and Educational System at the link(s): https://elearning.volgmed.ru/course/view.php?id=12343

Considered at the department meeting Life safety, protocol of «30» May 2025r. № 11.

Head of the Department

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