MINISTRY OF HEALTH OF THE REPUBLIC OF BELARUS EDUCATIONAL INSTITUTION BELARUSIAN STATE MEDICAL UNIVERSITY

APPROVED By Rector, Professor S.P. Rubnikovich 2024 Registration number MUHC

# PASSPORT (EXAMPLE) EXAM STATION CONTROL OF BLEEDING

**OBJECTIVE STRUCTURED CLINICAL EXAMINATION (OSCE)** 

Academic discipline «First Aid» Specialty: 1-79 01 01 «General Medicine»

#### Minsk 2024

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#### **RECOMMENDED FOR APPROVAL:**

Simulation and certification center of an educational institution "Belarusian State Medical University"

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#### 1. Level of measured training

The passport of the examination station «Control of bleeding» of the objective structured clinical examination (OSCE) was developed for the academic discipline «First Aid» in accordance with the standard curriculum for the specialty 1-79 01 01 «General Medicine» (registration №L 79-1- 003), approved by the First Deputy Minister of Education of the Republic of Belarus on April 21, 2021.

In total, the study discipline in specialty 1-79 01 01 «General Medicine» is allocated 90 academic hours, of which 40 are classroom hours and 50 hours of independent student work.

Recommended forms of current certification in specialty 1-79 01 01 «General Medicine» - exam (12 semester).

The examinees are 6th year students studying the specialty 1-79 01 01 «General Medicine» after the completion of the discipline «Surgical Diseases».

#### 2. Practical skill (manipulation)

Applying an Esmarch's type hemostatic tourniquet; applying a hemostatic twist tourniquet; applying a pressing bandage to a bleeding wound.

#### **3. Duration of station work**

The total worktime of the station -10 minutes; physical duration -8 minutes.

Table 1

	Station oper	ating time	
Actions at the station	Start time (min:sec)	End time (min:sec)	Duration of action (min:sec)
Examinee familiarization with a task	00:00	01:00	01:00
Tasks performance for the examinee	01:00	08:00	07:00
Remaining time warning for completing the task	08:00	08:00	00:00
Completing the examinee's work with the station	08:00	09:00	01:00
Change of examinees	09:00	10:00	01:00
Total or	perating time of the	e station	10:00

# 4. Station facilities and equipment

4. Station facilities and	Table 2
Nomination	Quantity (unit)
Workplace of the example of the exam	aminer
Office table	1 pc.
Office chair	by number of examiners
Laptop (tablet computer)	1 pc.
The second monitor (the second laptop)	1 pc.
Examiner's reminder for practical skills assessment using a checklist	by number of examiners
A4/A5 size note paper	by number of examiners
Ball-pen	by number of examiners
Drinking water	1 bottle (0.3-0.5 l)
Disposable drinking cup	by number of examiners
Checklist (if using paper ones)	by number of examinees + 3-5 pcs. (in case of vitiation)
Workplace of the ex	aminee
Electronic wall clock or mechanical one with second arrow	1 pc.
Office table (student's desk, instrumental table)	1 pc.
Office (student) chair or armchair	1 pc.
Mobile phone (imitation)	1 pc.
List of medical and other	
Universal car first aid kit	1 pc.
Esmarch's hemostatic tourniquet	1 pc.
Scarf (size 1m*1m) from textile material	1 pc.
Ribbon (lace)	2 pc.
Disposable/reusable napkin (20cm*40cm, 40cm*40cm or larger size)	1 pc.
Wooden stick (pencil)	1 pc.
Ball pen	1 pc.
List of consumal	bles
Non-sterile medical gloves (appropriate size)	by number of examinees
Disposable medical mask	by number of examinees
A piece of paper (5cm*5cm, 5cm*10cm or bigger size)	by number of examinees
Medical fixing bandage with non-fraying edges, non-sterile, 7-10cm width	by number of examinees
Non-sterile medical gauze napkin in package (1-2 pcs per package or more)	by number of examinees
Packages for sterilization according to the Klinipak type (10cm*30cm or other size) (packaging for napkins)	by number of examinees

by number of examinees
by number of examinees
by number of examinees
quipment
Technical specifications
Movable arms in the shoulder
joint;
movable legs at the hip and knee
joints

Actions of support personnel before starting station work:

1. Responsible for conducting OSCE:

determine the situation (scenario) in accordance with which the station work will be organized;

inform the laboratory assistant (specialist) responsible for preparing the station the abovementioned information;

together with a laboratory assistant (specialist), electronics technician (software engineer), check the visualization quality of the examinee's workplace, and, if necessary, select the most optimal one;

control the coherence of the laboratory assistant's (specialist) and the electronics technician's (programming engineer) work during the preparation and work of the station;

ensure that the examiner is familiar with the contents of the checklist (parameters for performing actions at the station, importance of actions coefficient, scoring criteria).

2. Electronics technician (programming engineer) responsible for preparing the station:

recharge or replace batteries of the equipment indicated in Table 2, requiring autonomous (wireless) work at the station;

monitor the wireless Internet network work at the station;

monitor the program work that provides video control and electronic checklists filling, as well as the station cameras and microphone work;

together with the laboratory assistant (specialist) responsible for OSCE conducting, check the quality of the examinee's workplace visualization, and, if necessary, select the most optimal one.

3. Laboratory assistant (specialist) responsible for preparing the station: check the presence of electronic checklists in the program providing their filling in; arrange furniture at the station according to Table 2;

prepare equipment for the examiner's workplace according to Table 2;

in case of paper checklists absence, print them in the required quantity according to situations (scenarios);

turn on the laptop (tablet computer) and the second monitor (second laptop), check the availability of Internet access and work of the program that provides video control at the station, as well as electronic checklists filling out;

check the synchronization of video monitoring on the laptop (tablet computer) and checklists on the second monitor (second laptop). In case of problems - inform the electronics technician (programming engineer) responsible for the station work provision;

prepare equipment for the examinee's workplace and station equipment;

in accordance with a certain situation (scenario), do the following:

- place the mannequin on a chair (armchair) at the examinee's workplace;

- invite a standardized patient;

- together with an electronics technician (software engineer), as well as the person responsible for conducting OSCE, check the visualization quality of the examinee's workplace, if necessary, select the most optimal one.

Actions of support personnel during station work:

1. To the person responsible for conducting OSCE:

monitor the examiner's work using a checklist in accordance with the examiner's reminder while assessing practical skills;

at the end of the exam, collect paper checklists, defect sheets, and other reporting documentation (if necessary) from the examiner.

2. Electronics technician (programming engineer) responsible for station preparation:

carry out remote control over the station work in a program that provides video control;

problems management related to the station software.

3. Laboratory assistant (specialist) responsible for preparing the station:

provide technical (user) assistance to the examiner while working at the station;

upon completion of each examinee's work, return the station to its initial condition;

if necessary, upon completion of the station work, print out the OSCE protocol or save it in the "Print to PDF" format.

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#### 5. Situations (scenarios)

Table 3

List of situations (scenarios)		
Situations (scenarios) serial number	Situation (scenario)	
	A traffic accident has occurred. One of the victims (an adult man about fifty years old) has a deep laceration in the upper third of the	
Nº 1	right forearm with signs of arterial bleeding. The car first aid kit contains dressing material and Esmarch's hemostatic tourniquet. The is need to apply an Esmarch's hemostatic tourniquet on the lower third of the victim's right shoulder.	
	A traffic accident has occurred. One of the victims (an adult man of about thirty years old) has a deep laceration in the lower third of the right shoulder with signs of arterial bleeding. The car first aid kit	
Nº 2	contains dressing material and Esmarch's hemostatic tourniquet. The victim needs to apply an Esmarch hemostatic tourniquet on the upper third of the right shoulder.	
Nº 3	An industrial injury occurred at an agricultural enterprise. The victim (an adult woman of approximately thirty years old) has a deep incised wound in the upper third of the left forearm with signs of arterial bleeding. The first aid kit contains dressing material, and some improvised materials include ribbons (laces), wooden stick (pencil). The victim needs to apply a hemostatic tourniquet.	
Nº 4	A domestic injury has occurred. The victim (an adult man approximately forty-five years old) has an incised wound on the back of his right hand with signs of venous bleeding. The home first aid kit contains dressing material. The victim needs to apply a pressing bandage.	

#### 6. Information for the examinee

Situation (scenario) №1.

You are a witness to a traffic accident. One of the victims (an adult man about fifty years old) has a deep laceration in the upper third of the right forearm with signs of arterial bleeding. The car first aid kit contains dressing material and Esmarch's hemostatic tourniquet. Provide aid to the victim.

#### Situation (scenario) № 2.

You are a witness to a traffic accident. One of the victims (an adult man about thirty years old) had a deep laceration in the lower third of the right shoulder with

signs of arterial bleeding. The car first aid kit contains dressing material and Esmarch's hemostatic tourniquet. Provide aid to the victim.

#### Situation (scenario) № 3.

You are a witness to an industrial injury at an agricultural enterprise. The victim (an adult woman of approximately thirty years old) has a deep incised wound in the upper third of the left forearm with signs of arterial bleeding. The first aid kit contains dressing material, improvised means - ribbons (laces), a wooden stick (pencil). Provide aid to the victim.

#### Situation (scenario) № 4.

You are a witness to a domestic injury. The victim (an adult man about fortyfive years old) has an incised wound on the back of his right hand with signs of venous bleeding. The home first aid kit contains dressing material. Provide aid to the victim.

#### 7. Information for examiners

Station task:

demonstration to examinees of the skills to stop various types of bleeding.

Functions of examiners:

loading an electronic checklist into the software or selecting a checklist in accordance with the serial number of the situation (scenario);

identification of the examinee's identity, filling out the identification part in an electronic or paper checklist (student's full name or identification number, faculty, group, course, department, practical skill (manipulation), date);

launching the examinee to the station;

registration of the sequence and correctness of the actions/discrepancies of the examinee's actions in accordance with the parameters of the actions in the checklist;

providing the examinee with the information needed announce during the execution of actions at the station;

time monitoring the examinee's work at the station, timely reminding about the end of the time allotted for completing the task, inviting the examinee to leave the station.

Information that must be provided to the examinee in the process of performing actions at the station (hereinafter referred to as introductory information):

Table 4

Examinee's action	Introductory information
According to the time specified in Table 1	To report:
	«You have one minute left»
Upon completion of the task (if the	To give thanks and ask to leave the
examinee completes work earlier than	station:
the allotted time or in according to	«Thank you. Please go to the next
time in Table 1)	station»

Information that is not provided to the examinee:

It is forbidden to give verbal and non-verbal prompts to the examinee while his/her presence at the station and in the process of completing the task;

it is forbidden to comment on the examinee's actions or engage in dialogue beyond the volume indicated in Table 8;

it is forbidden to ask clarifying questions to the examinee unless this is regulated by Table 8;

It is forbidden to express demands to the examinee «Faster», «Continue», «Don't hesitate», etc., as well as asking questions «Are you done?», «Are you finished?» and so on.

Actions of examiners before starting work at the station:

familiarize with the checklists used at the station;

familiarize with the order of simulation equipment work provided for the examination at the station;

check with the person responsible for conducting the OSCE which situations (scenarios) and checklists are defined for exam conducting at the station;

familiarize with the information that must be provided to the examinee in the process of actions performing at the station.

Actions of examiners during station work:

allow the examinee to enter the station after downloading the electronic checklist at the examiner's workplace or after filling out the identification part of the paper checklist;

announce the information that must be provided to the examinee in the process of performing actions at the station;

evaluate the actions performed by the examinee with 2 points for error-free execution of the action, 1 point for partial completion of the action, 0 points for failure to perform the action;

strictly observe the station work duration;

remind the examinee about the end time of the task and the need to leave the station;

at the end of the exam, complete paper checklists;

calculate the final mark in points<sup>1</sup> taking into account the total amount of points, the importance coefficient (if there is one in the checklist) and the "fine" for unsatisfactory completion of "critical" elements (if there is a point deduction scale):

convert the final mark in points into a mark on a 10-point grading scale, using the scale of conversion (recalculation) of points (if necessary).

#### 8. References

1. Kambalov, M. N. First aid: educational and methodological manual for 1st year students of all faculties of medical universities / M. N. Kambalov, D. A. Chernov, D. A. Prokopovich. – Gomel: GomSMU, 2017. – 172 p.

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3. Chernov, D. A. First aid: educational manual / D. A. Chernov [and others.]; edited by D. A. Chernov. – Gomel: GomSMU, – 2021. – 178 p.

4. Gusentsov, A. O. Basics of first aid. / A. O. Gusentsov. – Minsk: Amalfeya, 2019. – 48 p.

5. Medical simulation training specialist / Zh. A. Akopyan, A. A. Andreenko, E. Yu. Vasilyeva, M. D. Gorshkov, D. M. Gribkov, E. V. Dyachenko, Z. A. Zaripova, A.S. Zverev, A. L. Kolysh, V. A. Kubyshkin, Z. V. Lopatin, V. S. Oleksik, E. G. Ripp, A. A. Svistunov, Zh. M. Sizova, N. S. Slyadneva, K. V. Titkov, E. M. Khamatkhanova, G. V. Khlestova, S. V. Khodus, L. Yu. Chuchalina, L. B. Shubina // ed. M. D. Gorshkova. — Moscow: ROSOMED, 2021. – 500 p.

6. Specific sanitary and epidemiological requirements for the maintenance and operation of healthcare organizations, other organizations and individual entrepreneurs who carry out medical and pharmaceutical activities: Resolution of the Council of Ministers of the Republic of Belarus dated 03.03.2020 No. 130: with amendments and additions.

7. On establishing lists of first aid kits, emergency first aid kits, the attachments included in these first aid kits, and determining the order of their completion: Resolution of the Ministry of Health of the Republic of Belarus dated December 4, 2014 No. 80: with amendments and additions.

8. Clinical protocol for the provision of emergency care to the adult population: order of the Ministry of Health of the Republic of Belarus dated September 30, 2010 No. 1030: with amendments and additions.

9. Clinical protocols for providing emergency medical care to children: order of the Ministry of Health of the Republic of Belarus dated February 15, 2007 № 90.

<sup>&</sup>lt;sup>1</sup> Final mark in points =  $\Sigma$  corresponding coefficient of importance x mark in points for the parameter of performing actions

#### 9. Information for the standardized patient

Situation (scenario) № 1.

You are an adult male, approximately fifty years old, who was injured in a traffic accident. You have a deep laceration in the upper third of the right forearm with signs of arterial bleeding.

Provide the following information and perform the following actions while the examinee is working at the station (hereinafter referred to as introductory information and actions):

	Table 5
Examinee's action	Introduction and actions
Received consent to provide first aid. Said: <i>«Do you agree?»</i>	Give introductory information: «Agree»
Offered to take the necessary position. Said: <i>«Please sit down»</i> , helped the victim sit down	Sit down as you are asked
Asked the victim to press the artery at a distance	Press with the fingers of your left hand as well and in the same place as the examinee indicated to you
Asked the victim to stop finger pressure of the artery	Stop pressing at the indicated place, lower your left arm

Situation (scenario) № 2.

You are an adult man of about thirty years old, and you have been injured in a traffic accident. You have a deep laceration in the lower third of the right shoulder with signs of arterial bleeding.

Provide the following information and perform the following actions while the examinee is working at the station (hereinafter referred to as introductory information and actions):

Table 6

· · ·	Table 0
Examinee's action	Introduction and actions
Received consent to provide first aid. Said: <i>«Do you agree?»</i>	Give introductory information: «Agree»
Offered to take the necessary position. Said: <i>«Please sit down»</i> , helped the victim sit down	Sit down as you are asked
Asked the victim to press the artery at a distance	Press with the fingers of your left hand as well and in the same place as the examinee indicated to you
Examinee's action	Introduction and actions
Asked the victim to stop finger pressure of the artery	Stop pressing at the indicated place, lower your left arm

Situation (scenario) № 3.

You are an adult woman of approximately thirty years old who was injured at work at an agricultural enterprise. You have a deep incised wound in the upper third of the left forearm with signs of arterial bleeding.

Provide the following information and perform the following actions while the examinee is working at the station (hereinafter referred to as introductory information and actions):

	Tuble /
Examinee's action	Introduction and actions
Received consent to provide first aid. Said: <i>«Do you agree?»</i>	Give introductory information: «Agree»
Offered to take the necessary position. Said: <i>«Please sit down»</i> , helped the victim sit down	Sit down as you are asked
Asked the victim to press the artery at a distance	Press with the fingers of your right hand as well and in the same place as the examinee indicated to you
Asked the victim to stop finger pressure of the artery	Stop pressing at the indicated place, lower your right arm

Situation (scenario) № 4.

You are an adult man of approximately forty-five years old. A domestic injury has occurred. You have an incised wound on the back of your right hand with signs of venous bleeding.

Provide the following information and perform the following actions while the examinee is working at the station (hereinafter referred to as introductory information and actions):

Table 8

Table 7

Examinee's action	Introduction and actions
Received consent to provide first aid. Said: <i>«Do you agree?»</i>	Give introductory information: «Agree»
Offered to take the necessary position. Said: <i>«Please sit down»</i> , helped the victim sit down	Sit down as you are asked

#### 10. Information for a standardized colleague

Situation (scenario) № 1.

• A car accident has occurred. One of the victims (an adult man about fifty years old) has a deep laceration in the upper third of the right forearm with signs of arterial bleeding.

Provide the following information and perform the following actions while the examinee is working at the station (hereinafter referred to as introductory information and actions):

Table 9

Examinee's action	Introduction and actions
Asked the assistant to press artery at a	Press with the fingers of your left hand as well in
distance	the same place as the examinee indicated to you
Asked the assistant to stop finger	Stop pressing at the indicated place, lower
pressure of the artery	victim's left arm

Situation (scenario) № 2.

A traffic accident has occurred. One of the victims (an adult man about thirty years old) had a deep laceration in the lower third of the right shoulder with signs of arterial bleeding.

Provide the following information and perform the following actions while the examinee is working at the station (hereinafter referred to as introductory information and actions):

Table 10

Examinee's action	Introduction and actions
Asked the assistant to press artery at a	Press with the fingers of your left hand as well in
distance	the same place as the examinee indicated to you
Asked the assistant to stop finger	Stop pressing at the indicated place, lower
pressure of the artery	victim's left arm

Situation (scenario) № 3.

An industrial injury occurred at an agricultural enterprise. The victim (an adult woman of approximately thirty years old) has a deep incised wound in the upper third of the left forearm with signs of arterial bleeding.

Provide the following information and perform the following actions while the examinee is working at the station (hereinafter referred to as introductory information and actions):

Table 11Examinee's actionIntroduction and actionsAsked the assistant to press artery at a<br/>distancePress with the fingers of your right hand as well in<br/>the same place as the examinee indicated to youAsked the assistant to stop finger<br/>pressure of the arteryStop pressing at the indicated place, lower<br/>victim's right arm

Situation (scenario) № 4. Not envisaged.

# 11. Criteria for the examinee's actions evaluating 11.1. Evaluation sheet (checklist) № 1

(indicated in accordance with the serial number of the situation (scenario)) for the examination station «Control of bleeding » of the Objective Structured Clinical Examination (OSCE) in the academic discipline "First Aid"

Student's full name			
Faculty	group	course	
Department			
Practical skill (manipulati	an); annlying an Equand's true		

Practical skill (manipulation): applying an Esmarch's type hemostatic tourniquet

			Table 12
No.	Action performance parameter	Importance coefficient	Mark in points: implementation – 2; partial implementation – 1; failure – 0
1.	<ul> <li>Checked the absence of danger to himself and the victim:</li> <li>made a gesture «Environmental safety inspection»;</li> <li>said: <i>«Safely»</i></li> </ul>	1	
2.	<ul> <li>Has taken safety measures:</li> <li>said: <i>«If possible, treat hands with antiseptic»</i>;</li> <li>put on a mask;</li> <li>put on medical gloves</li> </ul>	1	
3.	<ul> <li>Made contact with the victim:</li> <li>introduced himself: said «My name is»;</li> <li>informed about his intention to help. Said: «I will help you, I will apply Esmarch's hemostatic tourniquet»;</li> <li>received consent to carry it out. Said: «Do you agree?»;</li> </ul>	1	
-	- offered to take the necessary position. Said: <i>«Please, sit down»</i> and helped the victim sit down.		
4.	<ul> <li>Gave the injured limb an elevated position:</li> <li>picked victim's right arm up and placed on examinee's shoulder</li> </ul>	2	

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N	0.	Action performance parameter	Importance coefficient	Mark in points: implementation – 2; partial implementation – 1; failure – 0
4	5.	<ul><li>Applied finger pressure on the artery at a distance:</li><li>placed the second, third, fourth fingers</li></ul>		
		in the upper third of the right shoulder at the place where the pulsation of the brachial artery was determined and pressed the artery;	2	
		<ul> <li>asked the assistant or the victim himself to repeat this action;</li> <li>checked its correct performing (made a comment in case of inaccurate action performing)</li> </ul>		
(	6.	Selected and prepared the site for applying		
		<ul> <li>the tourniquet:</li> <li>said: «In case of arterial bleeding from the upper third of the right forearm, a tourniquet is applied to the lower third of the right shoulder. When bleeding from wounds of the forearm and shoulder the tourniquet is applied to the shoulder (except its middle third), when bleeding from wounds of the shin and thigh - to the thigh (except for its lower third), above the site of injury»;</li> <li>wrapped circularly (completely) the lower third of the right shoulder with a towel or napkin, without formation of folds and irregularities</li> </ul>	1	
1	7.	Prepared and correctly positioned the		
		<ul><li>tourniquet:</li><li>took the tourniquet with both hands from</li></ul>		
		the edge with the buttons at a distance of about 15 cm between the hands, so that the buttons were located with the clasps	1	
		up inside the palm of the left hand (both palms in propation position):	1	
		<ul> <li>palms in pronation position);</li> <li>placed the tourniquet over the lower third of the right shoulder from the distal edge of the napkin;</li> </ul>		
		- stretched the tourniquet with both hands		

No.	Action performance parameter	Importance coefficient	Mark in points: implementation – 2; partial implementation – 1; failure – 0
8.	Applied a tourniquet:		
	<ul> <li>applied the first two rounds with strong tension, and each subsequent one - in a spiral manner with a decrease in tension in the direction «from the distal end of the limb to the proximal», the tourniquet rounds were applied without free spaces, covering each other by 1/3 - 1/2 of the width, without crossing;</li> <li>secured the free ends of the tourniquet with fasteners;</li> <li>asked the assistant or the victim himself to release the finger pressure on the artery;</li> </ul>	2	
	<ul> <li>lowered the victim's limb down</li> </ul>		
9.	<ul> <li>Checked the correct application of the tourniquet:</li> <li>said: <i>«The bleeding has stopped»</i>;</li> <li>placed the second, third (and fourth) fingers on the area of the radial artery of the victim's right hand;</li> <li>said: <i>«Pulse cannot be detected»</i>;</li> <li>said: <i>«The limb has turned pale»</i></li> </ul>	2	
10.	<ul> <li>Used the note:</li> <li>on a small piece of paper wrote down the time of tourniquet application, indicated last name and initials as persons, who applied a tourniquet;</li> <li>placed a note under the last tourniquet round</li> <li>Performed anesthesia:</li> </ul>	2	
11.	said: <i>«If possible, give the victim painkillers»</i>	1	
12.	<ul> <li>Applied an aseptic bandage to the wound in the upper third of the right forearm:</li> <li>said: <i>«If possible, treat the skin around the wound with an antiseptic»</i>;</li> <li>applied an aseptic (clean) napkin;</li> <li>applied a circular (6 – 8 rounds) bandage to the wound area in the upper third of the right forearm</li> </ul>	1,	

No.	Action performance parameter	Importance coefficient	Mark in points: implementation – 2; partial implementation – 1; failure – 0
13.	Immobilized the injured limb by applying a triangular (scarf) bandage to the victim's right arm:		
~	- gave the injured limb an average physiological position (the angle of flexion at the elbow is slightly less than 90 degrees, the forearm is parallel to the floor);		
	- brought the bandage under the forearm so that its base was parallel to the body midline, and the top was directed towards the elbow joint of the injured limb;		
	- lifted the upper end of the bandage up onto the shoulder of the damaged side and threw it from the shoulder of the damaged side along the back of the neck to the shoulder of the healthy side;	1	
	<ul> <li>raised the lower end of the bandage, going around the injured forearm, to the shoulder of the healthy side;</li> <li>tied the ends of the bandage on the</li> </ul>		
	<ul> <li>healthy side;</li> <li>fixed the top of the bandage so that the tourniquet remains visible;</li> </ul>		
•	- checked that only the fingertips remained visible for the limb observation;		
	<ul> <li>said: «In the cold season wrap the injured limb»</li> </ul>		
14.	<ul> <li>Provided transportation of the victim in a lying position to a healthcare organization:</li> <li>said: «Call an emergency medical team using the numbers «101*» or «103*» or «112*»» (* - telephone numbers in the</li> </ul>		
	Republic of Belarus); - said: «Report information about the victim's location, gender, approximate age, condition, the amount of first aid provided to the victim»;	1	

indicate in the note the time of loosening)»	
application of the tourniquet must be done higher than the previous place and	
every 20-30 minutes using finger pressure to stop bleeding (re-	
old. During long-term transportation loosen the tourniquet for 10-15 minutes	
not be applied to children under 3 years	
- said: <i>«The tourniquet application is for a maximum of 1 hour. Tourniquet must</i>	
transportation to a healthcare organization in a lying position»;	

(Name of examiner)

(signature)

Date \_\_\_\_\_

**11.2. Evaluation sheet (checklist)** № **2** (indicated in accordance with the serial number of the situation (scenario)) for the examination station «Control of bleeding» of the Objective Structured Clinical Examination (OSCE) in the academic discipline "First Aid"

Student's full name			
Faculty	group	course	
Department			

Practical skill (manipulation): applying an Esmarch's type hemostatic tourniquet

			Table 13
No.	Action performance parameter	Importance coefficient	Mark in points: implementation – 2; partial implementation – 1; failure – 0
1.	<ul> <li>Checked the absence of danger to himself and the victim:</li> <li>made a gesture «Environmental safety inspection»;</li> <li>said: <i>«Safely»</i></li> </ul>	1	
2.	<ul> <li>Has taken safety measures:</li> <li>said: <i>«If possible, treat hands with antiseptic»</i>;</li> <li>put on a mask;</li> <li>put on medical gloves</li> </ul>	1	
3.	<ul> <li>Made contact with the victim:</li> <li>introduced himself: said «My name is»;</li> <li>informed about his intention to help. Said: «I will help you, I will apply Esmarch's hemostatic tourniquet»;</li> <li>received consent to carry it out. Said: «Do you agree?»;</li> <li>offered to take the necessary position. Said: «Please, sit down» and helped the victim sit down.</li> </ul>	1	
4.	<ul> <li>Gave the injured limb an elevated position:</li> <li>picked victim's right arm up and placed on examinee's shoulder</li> </ul>	2	

No.	Action performance parameter	Importance coefficient	Mark in points: implementation – 2; partial implementation – 1; failure – 0
5.	<ul> <li>Applied finger pressure on the artery at a distance:</li> <li>placed the second, third, fourth fingers in the upper third of the right shoulder at the place where the pulsation of the brachial artery was determined and pressed the artery;</li> <li>asked the assistant or the victim himself to</li> </ul>	2	
	<ul> <li>repeat this action;</li> <li>checked its correct performing (made a comment in case of inaccurate action performing)</li> </ul>		
6.	<ul> <li>Selected and prepared the site for applying the tourniquet:</li> <li>said: <i>«In case of arterial bleeding from the lower third of the right shoulder, a tourniquet is applied to the upper third of the right shoulder. When bleeding from wounds of the forearm and shoulder the tourniquet is applied to the shoulder (except its middle third), when bleeding from wounds of the shin and thigh - to the thigh (except for its lower third), above the site of injury»</i>;</li> <li>wrapped circularly (completely) the upper third of the right shoulder with a towel or napkin, without formation of folds and irregularities</li> </ul>	1	
7.	<ul> <li>Prepared and correctly positioned the tourniquet:</li> <li>took the tourniquet with both hands from the edge with the buttons at a distance of about 15 cm between the hands, so that the buttons were located with the clasps up inside the palm of the left hand (both palms in pronation position);</li> <li>placed the tourniquet over the upper third of the right shoulder from the distal edge of the napkin;</li> <li>stretched the tourniquet with both hands</li> </ul>	1	

No.	Action performance parameter	Importance coefficient	Mark in points: implementation – 2; partial implementation – 1; failure – 0
8.	<ul> <li>Applied a tourniquet:</li> <li>applied the first two rounds with strong tension, and each subsequent one - in a spiral manner with a decrease in tension in the direction «from the distal end of the limb to the proximal», the tourniquet rounds were applied without free spaces, covering each other by 1/3 - 1/2 of the width, without crossing;</li> <li>secured the free ends of the tourniquet with fasteners;</li> <li>asked the assistant or the victim himself to release the finger pressure on the artery;</li> <li>lowered the victim's limb</li> </ul>	2	
9.	<ul> <li>Inverted the victum's finite</li> <li>Checked the correct application of the tourniquet:</li> <li>said: <i>«The bleeding has stopped»</i>;</li> <li>placed the second, third (and fourth) fingers on the area of the radial artery of the victim's right hand;</li> <li>said: <i>«Pulse cannot be detected»</i>;</li> <li>said: <i>«The limb has turned pale»</i></li> </ul>	2	
10.	<ul> <li>Used the note:</li> <li>on a small piece of paper wrote down the time of tourniquet application, indicated last name and initials as persons, who applied a tourniquet;</li> <li>placed a note under the last tourniquet round</li> </ul>	2	
11.	Performed anesthesia: - said: <i>«If possible, give the victim painkillers»</i>	1	
. 12.	<ul> <li>Applied an aseptic bandage to the wound in the lower third of the right shoulder:</li> <li>said: <i>«If possible, treat the skin around the wound with an antiseptic»</i>;</li> <li>applied an aseptic (clean) napkin;</li> <li>applied a circular (6 – 8 rounds) bandage to the wound area in the lower third of the right shoulder</li> </ul>	1	

No.	Action performance parameter	Importance coefficient	Mark in points: implementation – 2; partial implementation – 1; failure – 0
13.	Immobilized the injured limb by applying a triangular (scarf) bandage to the victim's right arm:		
	<ul> <li>gave the injured limb an average physiological position (the angle of flexion at the elbow is slightly less than 90 degrees, the forearm is parallel to the floor);</li> <li>brought the bandage under the forearm so that its base was parallel to the body midline, and the top was directed towards the elbow joint of the injured limb;</li> </ul>		
	- lifted the upper end of the bandage up onto the shoulder of the damaged side and threw it from the shoulder of the damaged side along the back of the neck to the shoulder of the healthy side;	1	
	- raised the lower end of the bandage, going around the injured forearm, to the shoulder of the healthy side;		
	<ul> <li>tied the ends of the bandage on the healthy side;</li> <li>fixed the top of the bandage so that the tourniquet remains visible;</li> </ul>		
	<ul> <li>checked that only the fingertips remained visible for the limb observation;</li> <li>said: <i>«In the cold season wrap the injured</i></li> </ul>		
•	limb»		
14.	Provided transportation of the victim in a lying position to a healthcare organization:		
	- said: «Call an emergency medical team using the numbers «101*» or «103*» or «112*»» (* - telephone numbers in the Republic of Belarus);		
	- said: «Report information about the victim's location, gender, approximate age, condition, the amount of first aid provided to the victim»;	1	
	<ul> <li>said: « It is necessary to provide victim's transportation to a healthcare organization in a lying position»;</li> </ul>		

TOTAL	
During long-term transportation loosen the tourniquet for 10-15 minutes every 20- 30 minutes using finger pressure to stop bleeding (re-application of the tourniquet must be done higher than the previous place and indicate in the note the time of loosening)»	
maximum of 1 hour. Tourniquet must not be applied to children under 3 years old.	

(Name of examiner)

(signature)

Date \_\_\_\_\_

### Evaluation sheet (checklist) № 3

(indicated in accordance with the serial number of the situation (scenario)) for the examination station «Control of bleeding» of the Objective Structured Clinical Examination (OSCE) in the academic discipline "First Aid"

Student's full name			
Faculty	group	course	
Department			

Practical skill (manipulation): applying a hemostatic twist tourniquet

			Table 14
No.	Action performance parameter	Importance coefficient	Mark in points: implementation – 2; partial implementation – 1; failure – 0
1.	<ul> <li>Checked the absence of danger to himself and the victim:</li> <li>made a gesture «Environmental safety inspection»;</li> <li>said: <i>«Safely»</i></li> </ul>	1	
2.	<ul> <li>Has taken safety measures:</li> <li>said: <i>«If possible, treat hands with antiseptic»</i>;</li> <li>put on a mask;</li> <li>put on medical gloves</li> </ul>	1	
3.	<ul> <li>Made contact with the victim:</li> <li>introduced himself: said «My name is»;</li> <li>informed about his intention to help. Said: «I will help you, I will apply hemostatic twist tourniquet»;</li> <li>received consent to carry it out. Said: «Do you agree?»;</li> <li>offered to take the necessary position. Said: «Please, sit down» and helped the victim sit down.</li> </ul>	1	
4.	<ul><li>Gave the injured limb an elevated position:</li><li>picked victim's left arm up and placed on examinee's shoulder</li></ul>	2	

No.	Action performance parameter	Importance coefficient	Mark in points: implementation – 2; partial implementation – 1; failure – 0
5.	Applied finger pressure on the artery at a distance:		
	<ul> <li>placed the second, third, fourth fingers in the upper third of the left shoulder at the place where the pulsation of the brachial artery was determined and pressed the artery;</li> <li>asked the assistant or the victim himself to</li> </ul>	2	
	<ul> <li>repeat this action;</li> <li>checked its correct performing (made a comment in case of inaccurate action performing)</li> </ul>		
6.	<ul> <li>Selected and prepared the site for applying the tourniquet:</li> <li>said: <i>«In case of arterial bleeding from the upper third of the left forearm, a twist tourniquet is applied to the lower third of the left shoulder. When bleeding from wounds of the forearm and shoulder the twist tourniquet is applied to the shoulder (except its middle third), when bleeding from wounds of the shin and thigh - to the thigh (except for its lower third), above the site of injury»</i>;</li> <li>wrapped circularly (completely) the lower third of the left shoulder with a towel or napkin, without formation of folds and irregularities</li> </ul>	1	
7.	<ul> <li>Prepared and correctly positioned the twist tourniquet:</li> <li>took the first ribbon of the twist tourniquet with both hands in the middle at a distance of about 25 cm, brought it under the victim's left arm, wrapped it around the arm slightly below the middle of the napkin and tied it 1 knot on the lateral side;</li> <li>took the second ribbon of the twist tourniquet with both hands in the middle at a distance of about 25 cm, brought it under the xield to the second ribbon of the twist tourniquet with both hands in the middle at a distance of about 25 cm, brought it under the victim's left arm, wrapped it around the arm 5 cm above the first ribbon and tied it</li> </ul>	1	

No.	Action performance parameter	Importance coefficient	Mark in points: implementation – 2; partial implementation – 1; failure – 0
	at 1 node on the lateral side;		
8.	<ul> <li>Applied a twist tourniquet:</li> <li>picked up a stick (pencil), placed it on the knot of the first ribbon and secured it with the second knot;</li> <li>rotated the stick (pencil) 5-10 turns;</li> <li>secured the stick (pencil), placed it on the knot of the second ribbon and fixed it with an additional knot;</li> <li>asked the assistant or the victim himself to release the finger pressure on the artery;</li> <li>lowered the victim's limb down</li> </ul>	2	
9.	<ul> <li>lowered the victim's find down</li> <li>Checked the correct application of the tourniquet:</li> <li>said: <i>«The bleeding has stopped»</i>;</li> <li>placed the second, third (and fourth) fingers on the area of the radial artery of the victim's left arm;</li> <li>said: <i>«Pulse cannot be detected»</i>;</li> <li>said: <i>«The limb has turned pale»</i></li> </ul>	2	
10. 11.	<ul> <li>Used the note:</li> <li>on a small piece of paper wrote down the time of tourniquet application, indicated last name and initials as persons, who applied a tourniquet;</li> <li>placed a note under the last tourniquet round</li> <li>Performed anesthesia:</li> </ul>	2	
11.	said: <i>«If possible, give the victim painkillers»</i>	1	
12.	<ul> <li>Applied an aseptic bandage to the wound in the upper third of the left forearm:</li> <li>said: <i>«If possible, treat the skin around the wound with an antiseptic»</i>;</li> <li>applied an aseptic (clean) napkin;</li> <li>applied a circular (6 – 8 rounds) bandage to the wound area in the upper third of the left forearm</li> </ul>	1	

No.	Action performance parameter	Importance coefficient	Mark in points: implementation – 2; partial implementation – 1; failure – 0
13.	Immobilized the injured limb by applying a triangular (scarf) bandage to the victim's left arm:		
	<ul> <li>gave the injured limb an average physiological position (the angle of flexion at the elbow is slightly less than 90 degrees, the forearm is parallel to the floor);</li> <li>brought the bandage under the forearm so that its base was parallel to the body midline, and the top was directed towards the elbow ioint of the injured limb.</li> </ul>		
	<ul> <li>the elbow joint of the injured limb;</li> <li>lifted the upper end of the bandage up onto the shoulder of the injured side and threw it from the shoulder of the injured side along the back of the neck to the shoulder of the healthy side;</li> </ul>	1	
	<ul> <li>raised the lower end of the bandage, going around the injured forearm, to the shoulder of the healthy side;</li> <li>tied the ends of the bandage on the healthy side;</li> </ul>		
	<ul> <li>fixed the top of the bandage so that the twist tourniquet remains visible;</li> <li>checked that only the fingertips remained visible for the limb observation;</li> </ul>		
· .	- said: «In the cold season wrap the injured limb»		
14.	<ul> <li>Provided transportation of the victim in a lying position to a healthcare organization:</li> <li>said: «Call an emergency medical team using the numbers «101*» or «103*» or «112*»» (* - telephone numbers in the Republic of Belarus);</li> </ul>		
	<ul> <li>said: «Report information about the victim's location, gender, approximate age, condition, the amount of first aid provided to the victim»;</li> <li>said: «It is necessary to provide victim's</li> </ul>	1	
	<ul> <li>said: «It is necessary to provide victim's transportation to a healthcare organization in a lying position»;</li> <li>said: «The twist tourniquet application is</li> </ul>		

for a maximum of 1 hour. Tourniquet must not be applied to children under 3 years old. During long-term transportation loosen the tourniquet for 10-15 minutes every 20-30 minutes using finger pressure to stop bleeding (re-application of the twist tourniquet must be done higher than the previous place and indicate in the note the time of tourniquet loosening)»	
TOTAL	

(Name of examiner)

(signature)

Date \_\_\_\_\_

### Evaluation sheet (checklist) № 4

(indicated in accordance with the serial number of the situation (scenario)) for the examination station «Control of bleeding» of the Objective Structured Clinical Examination (OSCE) in the academic discipline "First Aid"

Student's full name			
Faculty	group	course	
Department			
$D_{-1}$ , $1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1$			

Practical skill (manipulation): applying a pressing bandage to a bleeding wound

			Table 15
No.	Action performance parameter	Importance coefficient	Mark in points: implementation – 2; partial implementation – 1; failure – 0
1.	<ul> <li>Checked the absence of danger to himself and the victim:</li> <li>made a gesture «Environmental safety inspection»;</li> <li>said: <i>«Safely»</i></li> </ul>	1	
2.	<ul> <li>Has taken safety measures:</li> <li>said: <i>«If possible, treat hands with antiseptic»</i>;</li> <li>put on a mask;</li> <li>put on medical gloves</li> </ul>	1	
3.	<ul> <li>Made contact with the victim:</li> <li>introduced himself: said «My name is»;</li> <li>informed about his intention to help. Said: «I will help you, I will apply pressing bandage to the wound»;</li> <li>received consent to carry it out. Said: «Do you agree?»;</li> <li>offered to take the necessary position. Said: «Please, sit down» and helped the victim sit down.</li> </ul>	1	
4.	<ul> <li>Gave the injured limb the required position:</li> <li>raised the victim's right forearm and hand and placed it at the level of the victim's chest;</li> <li>turned the hand with the back surface up</li> </ul>	2	

No.	Action performance parameter	Importance coefficient	Mark in points: implementation – 2; partial implementation – 1; failure – 0
5.	<ul> <li>Applied an aseptic layer to the wound on the back of the right hand:</li> <li>said: <i>«If possible, treat the skin around</i> <i>the wound with an antiseptic»</i>;</li> <li>applied an aseptic (clean) napkin to the wound area;</li> </ul>	2	
6.	<ul> <li>Applied a pressing layer to the wound on the back of right hand:</li> <li>placed a cotton-gauze roller (a stack of napkins, a roll of bandage, fabric pad folded as a roller) into the projection of the wound</li> </ul>	2	
7.	<ul> <li>Applied a fixing layer to the wound on the back of the right hand (a cruciform bandage with fixation of the wrist joint):</li> <li>observed the patient's condition, stood facing him;</li> <li>took the head of the bandage with a right hand, holding the free end of the bandage with a left hand;</li> <li>placed the head of the bandage on top, bandaged from left to right;</li> <li>applied two fixing circular rounds on the back of the hand, forcefully bandaging the dressing material to the wound, leaving 1st finger of the hand free;</li> <li>made an oblique round along the back of the hand to the wrist area;</li> <li>wrapped the wrist joint from below;</li> <li>made an oblique round along the back of the hand from the space between the 1st and 2nd fingers of the hand;</li> <li>wrapped the palmar surface of the hand from below;</li> <li>repeated oblique rounds 6-8 times;</li> <li>applied 2 fixing circular rounds in the wrist area</li> </ul>	2	

N	Action performance parameter	Importance coefficient	Mark in points: implementation – 2; partial implementation – 1; failure – 0
8.	<ul> <li>Checked the correct application of the pressing bandage:</li> <li>said: <i>«The bandage is dry, the bleeding is stopped»</i>;</li> <li>placed the second, third (and fourth) fingers of the hand on the area of the radial artery of the victim's right hand;</li> <li>said: <i>«Pulse is determined»</i>;</li> <li>said: <i>«The fingertips did not turn pale»</i></li> </ul>	2	
9.	<ul> <li>Performed anesthesia:</li> <li>said: <i>«If possible, give the victim painkillers»</i></li> </ul>	1	
10	<ul> <li>Immobilized the injured limb by applying a triangular (scarf) bandage to the victim's right arm:</li> <li>gave the injured limb an average physiological position (the angle of flexion at the elbow is slightly less than 90 degrees, the forearm is parallel to the floor);</li> </ul>		
	- brought the bandage under the forearm so that its base was parallel to the body midline, and the top was directed towards the elbow joint of the injured limb;		
	<ul> <li>lifted the upper end of the bandage up onto the shoulder of the injured side and threw it from the shoulder of the injured side along the back of the neck to the shoulder of the healthy side;</li> <li>raised the lower end of the bandage,</li> </ul>	1	
	<ul> <li>going around the injured forearm, to the shoulder of the healthy side;</li> <li>tied the ends of the bandage on the healthy side;</li> <li>fixed the top of the bandage;</li> <li>checked that only the fingertips remained visible for the limb</li> </ul>		

No.	Action performance parameter	Importance coefficient	Mark in points: implementation – 2; partial implementation – 1; failure – 0
11.	<ul> <li>Provided transportation of the victim in a lying position to a healthcare organization:</li> <li>said: «Call an emergency medical team using the numbers «101*» or «103*» or «112*»» (* - telephone numbers in the Republic of Belarus);</li> <li>said: «Report information about the victim's location, gender, approximate age, condition, the amount of first aid provided to the victim»;</li> <li>said: «It is necessary to provide victim's transportation to a healthcare organization in a lying position»</li> </ul>	1	
	TOTAL		

(Name of examiner)

(signature)

Date \_\_\_\_

### 11.3. Point deduction scale for assessment sheet (checklist) No.\_\_\_\_

Table 16

Action elements description	Execution level

# 11.4. Conversion scale (recalculation) of points received by examinee for performing actions at the station on a 10-point grading scale for evaluation sheet (checklist) № 1

	Table 17
Mark in points	10-point rating scale
0-8	1
9-15	2
16-22	3
23-26	4
27-30	5
31-32	6
33-34	7
35-36	8
37	9
38	10

# 11.5. Scale of conversion (recalculation) of points received by examinee for performing actions at the station on a 10-point grading scale for assessment sheet (checklist) № 2

	Table 18
Mark in points	10-point rating scale
0-8	1
9-15	2
16-22	3
23-26	4
27-30	5
31-32	6
33-34	7
35-36	8
37	9
38	10

# 11.6. Scale of conversion (recalculation) of points received by examinee for performing actions at the station on a 10-point grading scale for assessment sheet (checklist) № 3

Table 19

	1001017		
Mark in points	10-point rating scale		
0-8	1		
9-15	2		
16-22	3		
23-26	4		
27-30	5		
31-32	6		
33-34	7		
35-36	8		
37	9		
38	10		

11.7. Scale to convert (recalculate) points received by examinee for performing actions at the station in a 10-point measurement program for assessment sheet (checklist) № 4

	Table 20
Mark in points	10-point rating scale
0-6	1
7-13	2
14-19	3
20-22	4
23-25	5
26-27	6
28-29	7
30	8
. 31	9
32	10

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#### 12. Defective sheet

to the assessment sheet (checklist) №\_\_\_\_\_ for the examination station «Control of bleeding» of the Objective Structured Clinical Examination (OSCE) in the academic discipline «First Aid»

Student's full name			
Faculty	group	course	
Department		A	
Practical skill (manipulation):			

(underline whatever applicable)

applying an Esmarch's type hemostatic tourniquet applying a hemostatic twist tourniquet applying a pressing bandage to a bleeding wound

Table 25

No.	List of unregulated and unsafe actions not included in evaluation sheet (checklist)	Date	Examiner's signature
No.	The list of additional actions of clinical significance is not included in the assessment sheet (checklist)	Date	Examiner's signature
		3	
•			

Recommendations for organizing the station «Bleeding control» OSCE for the academic discipline «First Aid» during the next exam

(Name of examiner)

(signature)