**Competence contest tasks of International Seminar**

**“Reindeer Husbandry – a Cornerstone of Indigenous Life in the Arctic”,**

**held in the framework of ARCTICSKILLS promotion initiatives**

1. **Competence “DESIGNING A REINDEER HERDERS’ CAMPSITE AND BUILDING A TENT”**

The competence consists of 2 modules: *the 1st module* to determine the Contestants’ practical skills in 3D computer modelling; *2nd module* to determine the practical skills of erecting a mobile tent.

The maximum score based on the results of 2 modules is 20 points.

1st MODULE

The task is aimed at determining participants’ practical skills in 3D computer modelling.

Time to complete the task:

The maximum score, a participant can receive for completing a task is 15 points.

The organizers will provide each participant with equipment and an individual work area. A participant performs tasks within his individual work area and does not interfere with other participants.

The participant must create a3D model of a reindeer herders’ campsite on the computer, including a mobile dwelling, a tent, an autumn corral. And distribute an area for reindeer grazing in the virtual camp. The entire composition must be presented in color in 3D format .

The contestant must create a 3D campsite model by using SketchUp Make 16.

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| --- | --- | --- | --- | --- |
| No. | Evaluationcriteria | Estimationmethod | Executionresult | Points |
| 1 . | All health and safety rules are observed while completing the task | Yes/  Partially /No | 1 / 0.5 / 0 |  |
| 2 . | A foundation is built (octahedron r = 4 m) | Yes / No | 1/0 |  |
| 3 . | The height of the poles is set to 10 m | Yes / No | 1/0 |  |
| 4 . | 4 walls are filled with colour | Yes / No | 1/0 |  |
| 5 . | The interior is filled with furniture from the Internet | Yes / No | 1/0 |  |
| 6 . | A mobile dwelling is constructed (length = 5 m, width = 3 m, height = 2.5 m) | Yes / No | 1/0 |  |
| 7 . | The door is made (1.5 mx 0.8 m, opaque) | Yes / No | 1/0 |  |
| 8 . | Windows are made (1 m x 0.7 m, 2 pcs, transparent) | Yes / No | 1/0 |  |
| 9 . | A triangular symmetrical roof is made, height 1m. | Yes / No | 1/0 |  |
| 10 . | The back wall is removed | Yes / No | 1/0 |  |
| 11 . | Additional furniture is filled from the Internet | Yes / No | 1/0 |  |
| 12 . | A tent for fawns is built | Yes / No | 1/0 |  |
| 13 . | Tents, a mobile dwelling and a corral is placed in an area of 20x30m | Yes / No | 1/0 |  |
| 14 . | The area is filled with colour | Yes / No | 1/0 |  |
| 15 . | Objects (a tent, a mobile dwelling, a corral) are filled with colour | Yes / No | 1/0 |  |
|  | TOTAL |  | 15 |  |

2nd MODULE

Over the centuries, a unique model of a human-nature relationship has been developedin the Arctic regions. Every object of nomadic life is brought to perfection.

According to the legends of many northern peoples, the tent and the man appeared almost simultaneously. A classic element of reindeer material culture is the tent of the northern reindeer herders - an indispensable home of tundra nomads. This is a small cone-shaped structure made of poles and covered with reindeer skins with a small hole in the middle for smoke escape. The opening at the top corresponds to the location of the Sun during the day and the Moon at night.

The installation and transportation of the dwelling, the sequence of assembly / disassembly are the most optimal in the tundra conditions. The conical shape of the tent is the most convenient, since its steep walls make the snow to slide down easily and make the whole construction stable against blizzards and high winds. The reindeer herders' tentconsist of 38 poles and several covers, which during relocations, fits into special sledges. The tent is still the most perfect dwelling in the tundra. It is lightweight, can be quickly assembled, disassembled and transferred to a new location.

The erection of a tent in tundra conditions requires certain skills and abilities. Knowing the sequence of the tenterection is very important and has strict rules.

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| --- | --- | --- | --- | --- |
| No. | PerformanceCriteria | Estimation method | Executionresult | Points |
| 1. | Preparing a place for a tent | Yes / No | 1/0 |  |
| 2. | Installation of a tripod in the center | Yes / No | 1/0 |  |
| 3. | Installation of poles of the first and second tiers, laying of the cover and the ability to tie to the poles | Yes / No | 1/0 |  |
| 4. | Correct installation of the entrance door | Yes / No | 1/0 |  |
| 5. | Compliance with the timeframe (30-40 min) | Yes / No | 1/0 |  |
|  | TOTAL |  | 5 |  |

1. **Competence “Reindeer Herding”**

The task is aimed at determining participants’ practical skills in weaving lasso, making harness elements from antlers and bones using engraver, practical skills in capturing animals, dressing harness, skills of handling animals, providing first aid in tundra conditions, using tools with mandatory compliance with health andsafety rules.

Time to complete the task:

The maximum score that a participant can receive for the task is 28 points

Within the time limit, the participant must:

- weave an even, neat lasso;

- make buttons for the harness;

- throwing a lasso around a pole, must hit a moving wooden target tied to a halyard;

- in 40 minutes to count the number of reindeer in groups;

- catch a reindeer using a lasso. To harness a leading reindeer (if several of them), put on the headband, fasten the straps leading to sleds. Lock the leash and lead out the team for evaluation;

- to show a first-aid provision expertise (the contestant is given a situational task (frostbite, cut, strain, sprain, fracture), fulfilling which participant tells how he will give first aid to the injured, while demonstrating the skills of applying bandages and to dress in splint).

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| --- | --- | --- | --- | --- |
| No. | Performance Criteria | Estimation method | Execution result | Points |
| 1 . | All health and safety rules are observed while completing the task | Yes / No | 1/0 |  |
| 2 . | A lasso is woven with ease | Yes / No | 1/0 |  |
| 3 . | 50 cm of lasso has been woven within a time limit | More than 50 / more than 40 / less than 40 cm. | 3/2/1 |  |
| 4 . | Buttons have been cut and drilled within a time limit | 3/2/1/0 pcs. | 2/1/0.5/0 |  |
| 5 . | The product is given an aesthetic appearance by using an engraver. | Yes / No | 1/0 |  |
| 6 . | A target from a halyard-tied piece of wood has been caught by a lasso | 3/2/1/0 hits | 3/2/1/0 |  |
| 7 . | General reindeer livestock counting | Yes / No | 2/0 |  |
| 8 . | Reindeer livestock counting, following groups of she-deer | Yes / No | 1/0 |  |
| 9 . | Reindeer livestock counting, following groups of syritsa | Yes / No | 1/0 |  |
| 10 . | Reindeer livestock counting, following groups of bull-calves | Yes / No | 1/0 |  |
| 11 . | Reindeer livestock counting, following groups of khory | Yes / No | 1/0 |  |
| 12 . | Reindeer livestock counting, following groups of last year’s youngsters | Yes / No | 1/0 |  |
| 13 . | The contestant is able to harness reindeer | Yes / No | 1/0 |  |
| 14 . | Capture of reindeer by a lasso | Yes / No | 2/0 |  |
| 15 . | Fixation of a reindeer | Yes / No | 2/0 |  |
| 16 . | Dressing the harness | Yes / No | 1/0 |  |
| 17 . | Fastening to sleds | Yes / No | 1/0 |  |
| 18 . | Provision of first aid | 3/2/1 | 3/2/1 |  |
|  | TOTAL |  | 28 |  |

1. **Competence “Fish Dishes from Chir (Broad Whitefish)”**

The task is aimed at determining the participants’ practical skills in preparing a dish from the northern breed of fish. Ability to prepare “stroganina” or “tong-balyk” (freeze sliced raw fish), sauce to the stroganina, serve a dish for tasting. Skills of working with the toolkit.

Time to complete the task:

The maximum score that the participant can receive for the task is 15 points

Within the time limit, the participant must:

- dress the fish;

- prepare the stroganina;

**-** sauce to the stroganina.

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| --- | --- | --- | --- | --- |
| No. | Performance Criteria | Estimation method | Execution result | Points |
| 1 . | All health and safety rules are observed while working with inventory and equipment | Yes / No | 1/0 |  |
| 2 . | Disposable gloves are used | Yes / No | 1/0 |  |
| 3 . | Head-dress is used | Yes / No | 1/0 |  |
| 4 . | Overalls are used | Yes / No | 1/0 |  |
| 5 . | Working space is clean during and after the cooking process | Yes / No | 1/0 |  |
| 6 . | Appearance of the dish:  thin curly strips of fish | Yes/  partially / no | 2/1/0 |  |
| 7 . | Fish has been sliced quickly, so it did not melt | Yes / No | 1/0 |  |
| 8 . | Rational use of foodstuff | Yes / No | 1/0 |  |
| 9 . | Correct weight of the dish | Yes / No | 1/0 |  |
| 10 . | Compliance with the timeframe | Yes / No | 1/0 |  |
| 11 . | Visual impression (composition) | Yes / No | 1/0 |  |
| 12 . | The consistency of every component of the dish | Yes / No | 1/0 |  |
| 13 . | Taste in combination with a sauce | Yes / No | 2/0 |  |
|  | TOTAL |  | 15 |  |

1. **Competence “OPERATION AND MAINTENANCE of off-road vehicles and diesel generators”**

The task is aimed at determining the participants’ practical skills on identification and elimination of snowmobile power system malfunctions, on driving skills. The task is to find and eliminate pre-set faults on the “Buran” snowmobile, determining the participants' practical skills in starting the generator, the ability to prepare fuel and eliminate minor problems. Faults are introduced on the eve of the contest in the presence of the chairman of the main jury, the malfunctions must be identical.

Time to complete the assignment:

The maximum score that a participant can receive for completing a task is 23 points .

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| --- | --- | --- | --- | --- |
| No. | Performance Criteria | Estimation method | Execution result | Points |
| 1 . | All health and safety rules are observed while working with inventory and equipment | Yes / No | 1/0 |  |
| 2 . | Overalls are used | Yes / No | 1/0 |  |
| 3 . | Workplace arrangements have been made | Yes / No | 1/0 |  |
| 4 . | A visual inspection of the snowmobile has been carried out | Yes / No | 0.5 / 0 |  |
| Power System | | | | |
| 5 . | Determined that the engine can not start | Yes / No | 0.5 / 0 |  |
| 6 . | Checked the fuel in the tank | Yes / No | 0.5 / 0 |  |
| 7 . | Checked the tightness of the fuel lines | Yes / No | 0.5 / 0 |  |
| 8 . | Checked the condition of filters | Yes / No | 0.5 / 0 |  |
| 9 . | Determined a malfunction of the coarse filter | Yes / No | 0.5 / 0 |  |
| 10 . | Eliminated the malfunction of the coarse filter | Yes / No | 0.5 / 0 |  |
| 11 . | Checked the operation of the gasoline pump | Yes / No | 0.5 / 0 |  |
| 12 . | Determined a malfunction of the gasoline pump | Yes / No | 1/0 |  |
| 13 . | Eliminated the malfunction of the gasoline pump | Yes / No | 0.5 / 0 |  |
| Transmission | | | | |
| 14 . | Carried out an inspection of the variator | Yes / No | 0.5 / 0 |  |
| 15 . | Attached the non-active cone | Yes / No | 0.5 / 0 |  |
| 16 . | Turned the active cone and turned the cone together with the stopper and cover | Yes / No | 0.5 / 0 |  |
| 17 . | Unscrewed the six bolts securing the cover to the active cone. | Yes / No | 0.5 / 0 |  |
| 18 . | The compressed spring did not “go-off” | Yes / No | 0.5 / 0 |  |
| 19 . | Determined a malfunction | Yes / No | 1/0 |  |
| 20 . | Replaced 3 weights | Yes / No | 1/0 |  |
| 21 . | Attached the cover to the active cone using six bolts | Yes / No | 0.5 / 0 |  |
| 22 . | Compliance with the timeframe | Yes / No | 0.5 / 0 |  |
| Generator | | | | |
| 23 . | Checked if there is a fuel | Yes / No | 0.5 / 0 |  |
| 24 . | Determining the number of engine strokes | Yes / No | 0.5 / 0 |  |
| 25 . | Started the engine | Yes / No | 0.5 / 0 |  |
| 26 . | Chose (determined) devices for connection | Yes / No | 1/0 |  |
| 27 . | Connected devices | Yes / No | 1/0 |  |
| 28 . | Checked whether the devices work | Yes / No | 0.5 / 0 |  |
| 29 . | Checked the fuel supply | Yes / No | 1/0 |  |
| 30 . | Checked the spark on the sparkplug | Yes / No | 1/0 |  |
| 31 . | Determined a malfunction | Yes / No | 1/0 |  |
| 32 . | Eliminated the malfunction | Yes / No | 1/0 |  |
| 33 . | Started the generator | Yes / No | 1/0 |  |
|  | TOTAL |  | 23 |  |

1. **Competence “FIRST AID IN FIELD (TUNDRA) CONDITIONS”**

The task is aimed at determining participants’ practical skills in providing first aid to victims in tundra conditions. Contestants should show their first aid expertise against frostbite, dislocation, fracture of the limb, should be able to splint, to bandage.

Time to complete the task:

The maximum score that the participant can receive for the task is 15 points

The contestant is offered a situational task, to accomplish which the participant must tell how he will provide first aid to victims, while demonstrating his splint and bandage skills.

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| --- | --- | --- | --- | --- |
| No. | Performance Criteria | Estimation method | Execution result | Points |
| Frostbite | | | | |
| 1 | Determined the degree of frostbite | Yes / No | 1/0 |  |
| 2 | Rubs the affected area with fur or wool cloth | Yes / No | 1/0 |  |
| 3 | Suggested hot tea | Yes / No | 1/0 |  |
| 4 | Carried the victim to a warm place | Yes / No | 1/0 |  |
| Cut | | | | |
| 5 | Washed the wound with hydrogen peroxide | Yes / No | 1/0 |  |
| 6 | Treated the edges of the wound with iodine or “brilliant green” *(an antiseptic embrocation)* | Yes / No | 1/0 |  |
| 7 | A bandage has been put | Yes / No | 1/0 |  |
| Strain, sprain | | | | |
| 8 | A tight bandage has been put | Yes / No | 1/0 |  |
| 9 | The patient was immobilized (a splint from improvised means was used) | Yes / No | 1/0 |  |
| Fracture | | | | |
| 10 | Determined the severity of fracture (open, closed) | Yes / No | 1/0 |  |
| 11 | Put a tourniquet | Yes / No | 1/0 |  |
| 12 | Put a note indicating the time of tourniquet application | Yes / No | 1/0 |  |
| 13 | Put a bandage on the wound | Yes / No | 1/0 |  |
| 14 | The patient was immobilized (a splint was used) | Yes / No | 1/0 |  |
| 15 | Performs activities to deliver the victim to a healthcare facility | Yes / No | 1/0 |  |
|  | TOTAL |  | 15 |  |