The final exam program on the discipline "Network administration"
of 2022 – 2023 academic year

Faculty: Information technologies.
Department: Information systems.
Code and name of the educational program: 6B06102 – Information systems.
Name of the discipline: Network administration.
Course: 3.
Teacher: Karyukin Vladislav Igorevich
The form of the final control of the academic discipline: test.
Platform: SDU Moodle.

Testing control: online proctoring.
Proctoring technology (English "proctor" – to control the exam course). As in the usual exam in the classroom, the proctors make sure that the examinees pass the test honestly: they complete the assignments on their own and do not use additional materials. Both a specialist (full-time proctoring) and a program that controls the test subject's desktop, the number of faces in the frame, extraneous sounds or voices, and even gaze movements (cyber proctoring) can monitor an online exam in real-time via a webcam. A type of mixed proctoring is often used: a video recording of the exam with the program's notes is additionally watched by a person and decides whether violations have actually taken place.

Each student must read and confirm in the chat that he is familiar with the schedule, rules, and instructions for proctoring. Before starting testing, the student must show an identity card. The student must connect to the exam on time, complete the exam without being distracted by extraneous things, without using additional tools and tips from other people.

Test duration: 60 minutes for 25 questions; one attempt.

The number of test questions: 25 (7 multiple choices + 6 true / false + 6 for matching + 6 choices of missing words = 25)

EXAM REGULATIONS
The exam is held on schedule. Thirty minutes before the start, students must prepare for the exam in accordance with the requirements of the proctoring instruction. Test results can be revised based on proctoring results. For example, if a student violated the test rules, his result would be canceled.

The topics of the exam

1. Introduction to Networking
2. Transport layer
3. Networking layer
4. IP addressing
5. Class addresses

6. Classless addresses
7. The data layer and physical layer
8. Network devices
9. Network troubleshooting
10. Device management
11. Routing fundamentals
12. Routing distances
13. DHCP configuration
14. Access control lists
15. NAT

Literature

1. Wendell O. "CCNA 200-301 Official Cert Guide Library," Cisco Press, 2019.
2. Glen E Clarke (Author), Richard Deal (Author), "CCT/CCNA Routing and Switching All-in-One Exam Guide (Exams 100-490 & 200-301) 1st Edition,"
3. Andrew S. Tanenbaum. Computer Networks 5th By Andrew S. Tanenbaum (International Economy Edition) by Andrew S. Tanenbaum David J. Wetherall(2010-01-09)
4. Networking Essentials Lab Manual, Cisco Networking Academy, 2021
5. James Kuros, Keith Ross. Computer Networking: A Top-Down Approach Hardcover – Student Edition, 2016

Grade scale:

«excellent» -	A	4,0	95-100
	A-	3,67	90-94
«good» -	B+	3,33	85-89
	B	3,0	80-84
	B-	2,67	75-79
	C+	2,33	70-74
«satisfied» -	C	2,0	65-69
	C-	1,67	60-64
	D+	1,33	55-59
	D-	1,0	50-54
«unsatisfied» -	FX	0,5	25-49
	F	0	0-24