

Duration: 1h30

15/01/2026

Full name:.....Domain:Group:

Final Exam(Correction)

Exercise1: (10 pts) Choose the correct answer(s):

<p>1. The biometric device is: A. Input device(01 pts) B. Output device C. Input/output device</p>	<p>6. Which network of the following is suitable for interconnecting a few buildings located in the same city: A. LAN B. MAN C. WAN</p>
<p>2. What is the main function of a router? A. Amplify network signals B. Connect devices within the same network C. Forward packets between different networks (01 pts) D. Convert digital signals into analog signals</p>	<p>7. Why is OSS important in IT and IoT projects? A. It allows developers to inspect, adapt, and improve software for devices (01 pts) B. It is always faster than proprietary software C. It requires no licenses to install commercial software</p>
<p>3. In an interconnected network, if a computer becomes defective, which of these topologies will be affected or damaged? A. Bus B. Ring (01 pts) C. Star</p>	<p>8. What is the primary purpose of a software license? A. To define the price of the software only B. To improve software performance C. To regulate how software can be used, modified, and distributed (01 pts)</p>
<p>4. What are the main advantages of an ERP? A. Cost reduction through rationalization ... (0.5 pts) B. The multiple entry of the same information in different modules. C. The elimination of all administrative tasks D. The centralization and uniqueness of information ... (0.5 pts)</p>	<p>9. How does NFC communication differ from typical RFID communication? A. NFC devices can communicate bidirectionally, while most RFID tags are read-only.(01 pts) B. NFC devices require batteries, while RFID does not. C. RFID allows two devices to exchange data like NFC, but only at 1 meter.</p>
<p>5. Which of the following is the correct order of computer families from largest/powerful to smallest/least powerful? A. Desktop PC → Media center → Laptop → Tablet → Smartphone → PDA → Server → Mainframe → Supercomputer B. Supercomputer → Mainframe → Desktop PC → Media center → Server → Laptop → Tablet → Smartphone → PDA C. Supercomputer → Mainframe → Server → Media center → Desktop PC → Laptop → Tablet → Smartphone → PDA (01 pts)</p>	<p>10. Which statement correctly describes the difference between a hub and a switch? A. A hub sends data only to the intended device, while a switch broadcasts data to all devices. B. A hub broadcasts data to all devices in the network, while a switch sends data only to the intended device. ... (01 pts) C. Both a hub and a switch broadcast data to all devices, but a switch is faster.</p>

Exercise 2:(10 pts) Answer briefly the following questions:

Question1: What is Free Software? Explain the four essential freedoms. ...**(02 pts)**

Definition: Guarantees freedom to run, study, modify, and share software.

Four Freedoms:

0. Run program for any purpose
1. Study & adapt (source code required)
2. Redistribute copies
3. Improve & share improvements

Question 2: Explain the difference between proprietary software and free software, giving an example for each type.

Proprietary: Closed source, cannot modify/redistribute, paid (e.g., Microsoft Word, Photoshop). ...**(01 pts)**

Free Software: Users can run, study, modify, redistribute (e.g., Linux, LibreOffice). ... **(01 pts)**

Question 3: Explain the key differences between **permissive** and **copyleft** software licenses, and give one example of each type.

Permissive: Minimal restrictions, can be included in proprietary software (MIT, BSD). ... **(01 pts)**

Copyleft: Must remain free; derivative works under same license (GPL).... **(01 pts)**

Question 4: What is the difference between the internet, intranet, and extranet? Give an example of the use of an Extranet between two organisations.

Internet: Global, public network. ...**(0.5 pts)**

Intranet: Private network within organization.... **(0.5 pts)**

Extranet: Private network with controlled access for external partners. ... **(0.5 pts)**

Example: Sharing inventory data with suppliers via Extranet. ... **(0.5 pts)**

Question 5: Give a definition of information technologies (IT) and name two fields where they are used.?

Definition: Use of computers, software, networks to manage information. ... **(01 pts)**

Fields: Healthcare (EHR), Education (e-learning), Business (ERP).... **(01 pts)**.

Good Luck