

**PALESTINE POLYTECHNIC UNIVERSITY**  
**COLLEGE OF INFORMATION TECHNOLOGY AND COMPUTER ENGINEERING**  
**COMPUTER AND PROGRAMMING PRINCIPLES 5055**  
**FIRST EXAM -- FALL 2021**

Student Name: \_\_\_\_\_ الاسم (عربي): \_\_\_\_\_

Date: 02/11/2021

Student Number: \_\_\_\_\_

Time: 45 Minutes

Lecture Time: \_\_\_\_\_

مازن زلوم       سوزان سلطان       عليان أبو غربية       ليانا التميمي       **ضع ✓ بجانب**  
ضياء أبو زينة       منال التميمي       ازدهار جوابرة       محمد أبو طه       **المدرس**  
موسى ارفاعية       يوسف صلاح       محمد جعبري       أحمد قديمات

Question	Q1(13)	Q2(14)	Q3(13)	Total Grade / 40
Mark				

**Q1 (13 Marks): Choose the correct answer for the following multiple choices, and fill in the table below.**

1	2	3	4	5	6	7	8	9	10	11	12	13
<b>B</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>B</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>B</b>	<b>B</b>	<b>B</b>	<b>B</b>	<b>D</b>

1	Which of the followings is a permanent memory type?	A. RAM B. ROM C. Cache D. Registers
2	Data stored _____ on HDD storage media.	A. Magnetically B. Optically C. Light pulses D. Flash technology
3	Converting electricity from AC to DC is the job of:	A. System clock B. Power supply C. Motherboard D. Modem
4	One of the following is not a network topology:	A. Bus network B. Star network C. Coaxial network D. Ring network

5	For ADSL connections, the Upstream is usually:	<ul style="list-style-type: none"> <li>A. 8 times the downstream</li> <li>B. 1/8 of the downstream</li> <li>C. Same as downstream</li> <li>D. Double the downstream</li> </ul>
6	The part of CPU that is responsible for executing arithmetic and logical operations is:	<ul style="list-style-type: none"> <li>A. ALU</li> <li>B. CU</li> <li>C. Registers</li> <li>D. Cache</li> </ul>
7	One of the following printers uses spraying to print information:	<ul style="list-style-type: none"> <li>A. Inkjet Printer</li> <li>B. Laser printer</li> <li>C. Thermal Printer</li> <li>D. Dot Matrix printer</li> </ul>
8	Magnetic stripe reader is an:	<ul style="list-style-type: none"> <li>A. Input Device</li> <li>B. Output Device</li> <li>C. Storage device</li> <li>D. Network Device</li> </ul>
9	Small programs that communicate with peripheral devices and configure them:	<ul style="list-style-type: none"> <li>A. Desktop software</li> <li>B. Device driver</li> <li>C. Disk defragmenter</li> <li>D. File compressor</li> </ul>
10	The ratio of the width of a display screen relative to its height is called:	<ul style="list-style-type: none"> <li>A. Resolution Ratio</li> <li>B. Aspect Ratio</li> <li>C. PPI Ratio</li> <li>D. Both B and C options</li> </ul>
11	A malware that secretly collects information about the user and sends it to outside sources	<ul style="list-style-type: none"> <li>A. Virus</li> <li>B. Spyware</li> <li>C. Worm</li> <li>D. Trojan Horse</li> </ul>
12	Firewall provides us with security through:	<ul style="list-style-type: none"> <li>A. Encrypting the data traffic</li> <li>B. Checking network traffic and allowing only the authorized ones to pass</li> <li>C. Removing Viruses from your computer</li> <li>D. Detecting Spyware in your computer</li> </ul>
13	The computer performance is affected by many factors like:	<ul style="list-style-type: none"> <li>A. RAM capacity</li> <li>B. Processor speed</li> <li>C. Cache size</li> <li>D. All of the choices</li> </ul>

**Q2) (14 Marks) State whether each of the following statement are True or False:**

No.	Statement	True/False
1	Twisted pairs cables have the fastest transmission speed.	F
2	Mainframe is the most powerful computer in the world.	F
3	The processor's clock speed is usually measured in GB.	f
4	$2^{30}$ Byte is called Terabyte.	F
5	CLI User interface is easier to use than Graphical User Interface.	F
6	The way by which network devices are physically connected together is called a topology.	T
7	An SSD is organized into tracks and sectors.	F
8	A Trojan horse malware uses social engineering to replicate itself on other computers.	F
9	A repeater is used to connect wireless devices with the wired network.	F
10	Magnetic tape is very slow sequential access storage media.	T
11	When a computer is started, the operating system loads onto the computer's storage from memory.	F
12	It is a good practice to avoid putting too many personal details on your website or your social media account.	T
13	A client is a computer used to host programs and data for a network and responds to server requests.	F
14	A web application runs inside a web browser.	T

**Q3 ) (13 Marks) Answer the followings:**

**a) (8 Marks) Fill the spaces with the most suitable terms.**

1. The set of rules and procedures that govern correct communication between different parties is called Internet Protocol.
2. When data is sent over a network connection, the data is divided into smaller units called Data Packect.
3. The locations on the motherboard into which adapter cards can be inserted to connect those cards to the motherboard are called Expansion Slot.
4. A small data file that saved on your hard disk when visiting a website and tracks your browsing activities is called a cookies.

**b) (5 Marks) What is the needed time (in seconds) to download a file with size 2 GB, if you have an Internet connection speed of 8 Mbps?**

$$(2 * 2^{10} * 8) / 8 = 2 * 2^{10} \text{ seconds OR } 2 * 1024 = 2048$$

Best Wishes 😊