



SCHOOL OF SCIENCE AND TECHNOLOGY

Semester 2: Year 2023

FINAL EXAMINATION PAPER

ITC100: INFORMATION TECHNOLOGY FOR THE WORKPLACE

Important Instructions to Students:

1. Read the questions, and instructions carefully and answer the questions.
2. You are allowed an **extra 10 minutes of reading time** (during this time, you are not allowed to write with a pen) and **180 minutes (3 Hours) to complete this paper**.
3. Silent, non-programmable calculators are allowed, but not supplied.
4. Write all your answers in the answer booklet provided. If you need extra sheets, please ask from the supervisor. Write your name, course code, and student identification number in the answer booklet and in the attendance sheet.
5. **This Final Examination Paper is worth 100 marks and contributes 50% of the total course assessments.** Students must **at least score 40%** in this final exam to pass the course.
6. This paper contains four (4) sections A, B, C, and D. All questions are compulsory.
7. Write all your answers legibly. The marker has the right to award a zero for answers that are not legible.
8. This is a **Closed Book Examination**. The University views plagiarism, cheating, and dishonest practice as serious offences and if found, offenders are penalized.

Examination Paper Content (Format):

Section	Question	Content	Marks	Suggested Time
A	1-30	Multiple choice	30	54 minutes
B	1-15	True / False	15	27 minutes
C	1-15	Fill in the Blanks	15	27 minutes
D	1-11	Open -Ended Questions	40	72 minutes
		Total	100	180 minutes

Write the question number and the letter which represents the **most** appropriate answer for each question in the answer booklet. Each question is worth 1 mark.

1. Fifty years ago, computers were used primarily by researchers and _____.
 - A. musicians
 - B. scientist
 - C. writers
 - D. designers

2. In the early 1980s, _____ were invented and computer use increased dramatically.
 - A. printers
 - B. networks
 - C. microcomputers
 - D. computers

3. Computing technologies make it possible to have _____, traditional appliances with some type of built-in computer or communications technology.
 - A. design appliances
 - B. smart computers
 - C. home computers
 - D. smart appliances

4. Many schools, particularly college campuses, today have wireless _____ that allow students to connect their devices wirelessly to the Internet and to campus resources from anywhere on campus.
 - A. hotspots
 - B. hotpoints
 - C. compots
 - D. compoints

5. Access control at many businesses and organizations is provided by _____, which allows only authorized individuals to enter an office building, punch in or out of work, or access the company network via an access card or a fingerprint or hand scan.
 - A. barcodes
 - B. virtual reality glasses
 - C. collaboration systems
 - D. authentication systems

6. ____ occurs when data is entered into the computer.
- A. Output
 - B. Processing
 - C. Input
 - D. Storage
7. In addition to the four primary computer operations, today's computers almost always perform ____ functions.
- A. punching
 - B. communications
 - C. sorting
 - D. programming
8. When data is processed into a meaningful form, it becomes ____.
- A. information
 - B. code
 - C. program
 - D. a database
9. Hollerith's machine was used to process the 1890 U.S. Census data in ____, as opposed to the decade it usually took to process the data manually.
- A. two and one-half years
 - B. six and one-half years
 - C. four and one-half years
 - D. eight and one-half years
10. Integrated circuits incorporate many transistors and electronic circuits on a single tiny silicon chip, allowing ____ to be even smaller and more reliable than earlier computers.
- A. second- generation computers
 - B. third- generation computers
 - C. fourth- generation computers
 - D. fifth- generation computers
11. Common input devices include the keyboard, ____, and integrated video cameras.
- A. printer
 - B. mouse
 - C. speaker
 - D. monitor

12. A variety of ____ and network adapters are available to communicate electronically because there are different types of Internet and network connections.
- A. punch cards
 - B. licenses
 - C. monitors
 - D. modems
13. The term ____ refers to the programs or instructions used to tell the computer hardware what to do.
- A. hardware
 - B. port
 - C. software
 - D. adapter
14. ____ that allow individuals to perform specific tasks are launched via the operating system, such as by using the Windows Start menu on Windows computers.
- A. Clouds
 - B. Protocols
 - C. Routers
 - D. Apps
15. Application programs can help users write their own programs in a form the computer can understand using a programming language such as Visual Basic, COBOL, C++, Java, or ____.
- A. Virtual D
 - B. Virtual RPG
 - C. Fort
 - D. Python
16. Some languages are traditional programming languages for developing applications; others, such as markup and scripting languages like HTML, XHTML, and ____, are designed to be used to create Web pages.
- A. TCP/IP
 - B. Rextore
 - C. PDF
 - D. JavaScript
17. A ____ is loosely defined as a small device that has built-in computing or Internet capability.
- A. mainframe
 - B. midrange server
 - C. mobile device
 - D. personal computer

18. Because many mobile devices and personal computers today are continually connected to the Internet, securing those devices against computer viruses and ____ is essential for both individuals and businesses.
- A. hackers
 - B. scripts
 - C. booters
 - D. applets
19. A personal computer or PC, originally called a ____, is a small computer designed to be used by one person at a time.
- A. processor
 - B. microcomputer
 - C. microchip
 - D. coprocessor
20. Conventional personal computers that are designed to fit on or next to a desk are often referred to as ____.
- A. desktop computers
 - B. laptop computers
 - C. office computers
 - D. processor computers
21. Hybrid notebook-tablet computers are also called convertible tablets or ____.
- A. 2-in-1 computers
 - B. netbook computers
 - C. laptop computers
 - D. PDAs
22. A(n) ____ is a computer used to host programs and data for a network.
- A. mainframe computer
 - B. super server
 - C. midrange server
 - D. Internet server
23. A ____ is a collection of computers and other devices that are connected in order to enable users to share hardware, software, and data, as well as to communicate electronically with each other.
- A. Computer bank
 - B. database
 - C. data bank
 - D. computer network

24. To request a Web page or other resource located on the Internet, use its ____.
- A. MAC address
 - B. menu bar
 - C. domain ID
 - D. Internet address
25. Similar to the way an IP address or domain name uniquely identifies a computer on the Internet, a ____ uniquely identifies a specific Web page.
- A. universal resource identifier (URI)
 - B. Web ID (WID)
 - C. uniform resource locator (URL)
 - D. Web resource identifier (WRI)
26. To contact people using the Internet, you most often use their ____.
- A. domain names
 - B. e-mail addresses
 - C. usernames
 - D. passwords
27. To navigate to a new Web page for which you know the URL, type that URL in the browser's ____ bar and press Enter.
- A. address
 - B. domain
 - C. data
 - D. menu
28. There are several special Web pages, called ____, available to help you locate what you are looking for on the Internet.
- A. search sites
 - B. virtual IDs
 - C. domain sites
 - D. Internet repositories
29. ____ are illustrations of faces showing smiles, frowns, and other expressions that are created with keyboard symbols.
- A. Spams
 - B. Phishes
 - C. Emoticons
 - D. Trojan horses

30. A variety of problems have emerged from our extensive use of computers and related technology, ranging from stress and health concerns to the proliferation of _____ and malware.

- A. wardriving
- B. domain theft
- C. spam
- D. caching

Read each question carefully and write either TRUE or False in the answer booklet.
Each question is worth 1 mark.

1. Just as you can learn to drive a car without knowing much about car engines, you can learn to use a computer without understanding the technical details of how a computer works.
2. Computer literacy is knowing about and understanding computers and their uses.
3. Fourth-generation computers witnessed the development of computer networks, wireless technologies, and the Internet.
4. Storage devices are used to store data on or access data from storage media, such as DVDs and flash memory cards.
5. There are application programs that help users write their own programs in a form the computer can understand using a programming language.
6. Systems analysts design computer systems to be used within their companies.
7. Tablet computers are typically about the size of a notebook computer and are designed to be used with a digital pen/stylus or touch input.
8. Web browsers maintain a History list, which is a record of all Web pages visited during the period of time specified in the browser settings.
9. Wireless networking allows the use of computers in virtually any location.
10. The background work area displayed on the screen for computers running Microsoft Windows is called the desktop.
11. The binary numbering system uses only two symbols—the digits 0 and 1—to represent all possible numbers.
12. The system unit is the main case of a computer or mobile device.

13. Storage devices can be internal (located inside the system unit), external (plugged into an external port on the system unit), or remote (located on another computer).
14. Notebook and netbook computers usually have a keyboard that is similar to a desktop keyboard, but it is typically smaller.
15. With handwriting recognition, the computer interprets data handwritten with a digital pen as individual characters.

Fill in the correct terms from the list of terms given with the descriptions. Write the question numbers and the correct terms in the answer booklet. Each question is worth 1 mark.

Application software, Office suites, Freeware, Spreadsheet, Internet, Extranet, Intranet, virtualization, virus, topology, Telesurgery, Satellite, telecommunications, Footer, Smart appliances.

1. _____, sometimes called productivity software suites, are used by most businesses and many individuals to produce written documents.
2. _____ consists of programs designed to perform specific tasks or applications.
3. _____ programs are software programs that are given away by the author for others to use free of charge
4. _____ software provides users with a convenient means of creating documents containing complex mathematical calculations.
5. In a typical word processing program, a(n) _____ is specified text that appears at the bottom of each page.
6. The term communications, when used in a computer context, refers to _____.
7. _____ phones are most often used by individuals—such as soldiers, journalists, wilderness guides, and researchers—traveling in remote areas where continuous cellular service might not be available.
8. _____ is a form of robot-assisted surgery, in which a robot controlled by a physician operates on the patient.
9. The physical _____ of a computer network indicates how the devices in the network are arranged.
10. The _____ is the largest and most well-known computer network, linking millions of computers all over the world.

11. A(n) _____ is a private network, such as a company LAN, that is designed to be used by an organization's employees and is set up like the Internet.
12. A company network that is accessible to authorized outsiders is called a(n) _____.
13. One of the most common online security risks today is your computer becoming infected with a(n) _____.
14. One trend involving servers is _____, which means creating virtual (rather than actual) versions of a computing resource.
15. _____ are traditional appliances with some type of built-in computer or communications technology

Answer ALL the questions from this section in the answer booklet provided.

1. Define the four primary operations of a computer also called the IPO Cycle and give an example of each. **(4 Marks)**
2. List and explain the six categories into which computers are generally classified. **(6 Marks)**
3. List at least four common uses for computer networks. **(4 Marks)**
4. List at least four strategies for virus prevention: **(4 Marks)**
5. What are the phases involved in the program development life cycle? List down the five steps involved in PDLC. **(5 Marks)**
6. Describe the purpose of databases and the functions of a database management system (DBMS). **(2 Marks)**
7. What is an online hoax? **(1 Marks)**
8. What is a trademark? How long do trademarks last? **(2 marks)**
9. Convert the following from Decimal to Binary (1 byte). **(1 Mark)**
A. 42
10. Convert the following from Binary to Decimal (1 byte). **(1 Mark)**

11. Write the three-word meaning of the abbreviation below: (Choose any 10 of your choice) **(10 marks)**

- a. URL – _____
- b. USB – _____
- c. RAM – _____
- d. ROM – _____
- e. ALU – _____
- f. LCD – _____
- g. LED – _____
- h. RFID – _____
- i. DOS – _____
- j. GPS – _____
- k. LAN – _____
- l. P2P – _____
- m. WAN – _____
- n. VPN – _____
- o. WWW – _____
- p. ISPs – _____

End of Exam