



The University of Fiji
(An Entity of Arya Pratinidhi Sabha of Fiji)



SCHOOL OF SCIENCE & TECHNOLOGY

Semester 1, 2024

FINAL EXAMINATION PAPER

ITC100: INFORMATION TECHNOLOGY FOR THE WORKPLACE

Important Instructions to Students:

1. Read the questions, instructions carefully and answer the questions.
2. You are allowed an **extra 10 minutes reading time** (during this time, you are not allowed to write with 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 Course Examination Paper is worth 100 marks 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 to answer.
7. Write all your answers legibly. The marker has the right to award 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:

<u>Section</u>	<u>Question</u>	<u>Content</u>	<u>Marks</u>	<u>Suggested Time</u>
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	1-16	Long Answer Questions – Open Ended	40	72 minutes
		TOTAL	100	180 Minutes

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Section A Multiple Choice Questions (30 marks)

Write the question number and letter of the correct answer in the Answer book.

1. _____ allow the user to issue commands by selecting icons, buttons, menu items, and other objects typically with a mouse, pen, or finger.
 - A. Graphical user interfaces
 - B. Command line interfaces
 - C. Desktops
 - D. Command-driven interfaces

2. _____ 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

3. _____ have begun to replace ROM for storing system information, such as a computer's BIOS.
 - A. Motherboards
 - B. Microprocessors
 - C. Adapter cards
 - D. Flash memory chips

4. _____ is one of the most widely-used versions of Linux.
 - A. Ubuntu / Linux
 - B. Chrome
 - C. Cisco
 - D. Uhuru

5. 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

6. A _____ is a software program that is designed to cause damage to a computer or perform some other malicious act.
 - A. firewall
 - B. utility program
 - C. spyware
 - D. computer virus

7. A computer's ____ is a collection of programs that manage and coordinate the activities taking place within the computer.
- A. database system
 - B. storage system
 - C. application system
 - D. operating system
8. Anything (such as a program, letter, digital photograph, or song) stored on a storage medium is referred to as a ____.
- A. label
 - B. index
 - C. folder
 - D. file
9. Rodney owns a computer that he uses to work, keep in touch with friends and family, watch movies, listen to music, and use the Internet. If Rodney wants to record music files onto a CD, he needs to make sure that his operating system has CD-____ capabilities.
- A. mirroring
 - B. burning
 - C. hybrid
 - D. striping
10. Fifty years ago, computers were used primarily by researchers and ____.
- A. musicians
 - B. scientists
 - C. writers
 - D. designers
11. In DOS, the command ____ displays the files and folders in the current location.
- A. CD
 - B. FORMAT
 - C. DIR
 - D. COPY
12. Most computers today support the ____ standard, which means the computer automatically configures new devices as soon as they are installed and the computer is powered up.
- A. Plug and Play
 - B. Match
 - C. Serial port
 - D. Parallel port

13. Rearranging the data on the hard drive so all files are stored in contiguous locations is called ____.
- A. disk defragmentation
 - B. file compression
 - C. disk backup
 - D. disk cleanup
14. Some drive letters, such as the letter _____ that is typically used with the primary hard drive, are usually consistent from computer to computer and do not change even if more storage devices are added to the computer.
- A. A
 - B. B
 - C. C
 - D. H
15. The _____ boots the computer, launches application software, and ensures that all actions requested by a user are valid and processed in an orderly fashion.
- A. startup
 - B. operating system
 - C. driver
 - D. registry
16. The _____ is the section of a CPU core that performs arithmetic involving integers and logical operations.
- A. FPU
 - B. control unit
 - C. decode unit
 - D. ALU
17. The bus width and bus speed together determine the bus's ____.
- A. clock speed
 - B. bandwidth
 - C. machine cycle
 - D. memory
18. 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

19. To contact people using the Internet, you most often use their ____.
- A. domain names
 - B. e-mail addresses
 - C. usernames
 - D. passwords
20. To synchronize all of a computer's operations, a ____, which is located on the motherboard, is used.
- A. cycle chip
 - B. fetch unit
 - C. system clock
 - D. microprocessor
21. 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
22. A network adapter, also called a _____ when it is in the form of an expansion card, is used to connect a computer to a network.
- A. network interface card (NIC)
 - B. powerline card
 - C. data communications card (DCC)
 - D. USB
23. A software that helps a peripheral device establish communication with its host device.
- A. Device Hub
 - B. Device Driver
 - C. Hot-Plug
 - D. Data Bus
24. An important task that the operating system performs is ____, which keeps track of the files stored on a computer so that they can be retrieved when needed.
- A. disk management
 - B. file management
 - C. file listing
 - D. file recovery
25. In a _____ network, each computer or device is connected to multiple (sometimes all of the other) devices on the network.
- A. bus
 - B. star
 - C. ring
 - D. mesh

26. In a worksheet, the intersection of a row and a column is called a _____.
A. pointer
B. table
C. footer
D. cell
27. In spreadsheet programs, labels and constant values are always copied exactly to the new location; what happens to formulas when they are copied depends on whether they use relative cell referencing or _____.
A. total cell referencing
B. integral cell referencing
C. absolute cell referencing
D. full cell referencing
28. One of the most common painting programs is _____.
A. Macromedia's Dreamweaver
B. Adobe's Acrobat
C. Microsoft Paint
D. IBM's Storyboard
29. The Internet began as an experimental network that is known by?
A. Internet2
B. Internet
C. World Wide Web
D. ARPANET
30. To restore a file or folder deleted from your computer's hard drive, open the _____ and restore the file.
A. Recycle Bin
B. Windows Explorer
C. System Restore program
D. Recycle Menu

Section B True or False Questions (15 marks)

Write “True” or “False” or “T” or “F” in your answer book

1. Computer literacy is knowing about and understanding computers and their uses.
 - a. True
 - b. False

2. Fourth-generation computers witnessed the development of computer networks, wireless technologies, and the Internet.
 - a. True
 - b. False

3. There are application programs that help users write their own programs in a form the computer can understand using a programming language.
 - a. True
 - b. False

4. The binary numbering system uses only two symbols—the digits 0 and 1—to represent all possible numbers.
 - a. True
 - b. False

5. Pseudocode expresses the steps in a program, module, or method, but it uses English-like statements in place of the flowchart’s graphical symbols.
 - a. True
 - b. False

6. The system unit is the main case of a computer or mobile device. _____
 - a. True
 - b. False

7. Benchmark tests typically run the same series of programs on several computer systems that are identical except for one component (such as the CPU) and measure how long each task takes in order to determine the overall relative performance of the component being tested. _____
 - a. True
 - b. False

8. The video card or the integrated graphics component determines the graphics capabilities of the computer. _____
 - a. True
 - b. False

9. Computer speakers are the most common type of audio output device. _____
- True
 - False
10. As you work on your computer, the operating system continuously manages your computer's resources and makes them available to devices and programs when they are needed.
- True
 - False
11. File extensions should not be changed by the user because the operating system uses them to identify the program that should be used to open the file.
- True
 - False
12. In its early years, the Internet was used primarily by the government, scientists, and educational institutions.
- True
 - False
13. People who use the Internet for activities, such as looking up telephone numbers, browsing through online catalogs, or making an online purchase, are referred to as "users."
- True
 - False
14. Most search sites today are designed for keyword searches; some sites allow directory searches as well.
- True
 - False
15. One of the most recent adaptive software development approaches is agile software development (ASD).
- True
 - False

Section C Fill in the Blanks (15 marks)

database engine, primary key, users, footer, Control, dial-up, Direct, cybercrime, maintenance, program development life cycle, formula, analog, Satellite, Telesurgery, topology,

1. A key component of a DBMS is the _____, the part of the program that actually stores and retrieves data.
2. A(n) _____ in a database table must uniquely identify each record in that table.
3. The _____ in a database system are the ones who enter data, update data, and retrieve information from the database when necessary.
4. In a typical word processing program, a(n) _____ is specified text that appears at the bottom of each page.
5. To open the Web page associated with a hyperlink included in a document (assuming you have an active Internet connection), hold down the _____ key and then click the hyperlink.
6. When using a spreadsheet, a(n) _____ performs mathematical operations using the content of other cells (such as adding or multiplying the values in the specified cells) and displays the result in the cell containing the formula.
7. The original first-generation cell phones were _____ and designed for voice data only.

8. _____ 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.

9. _____ is a form of robot-assisted surgery, in which a robot controlled by a physician operates on the patient.

10. The physical _____ of a computer network indicates how the devices in the network are arranged.

11. In _____ connections, your computer dials up and connects to your ISP's computer only when needed.

12. _____ connections keep your devices continually connected to your provider and, therefore, continually connected to the Internet.

13. Computer crime, sometimes referred to as _____ includes any illegal act involving a computer.

14. Program _____ is the process of updating software so it continues to be useful.

15. Each phase of the _____ produces some type of documentation to pass on to the next phase.

Section D Open Ended Questions (40 marks)

1. Define the following terms (2 Marks)
 - a. Application Software
 - b. Operating System
 - c. Programming Language
 - d. Web Browser
2. What are the four differences between a desktop computer and a portable computer? (2 Marks)
3. Explain the IPOS Cycle with a diagram. (2 Marks)
4. Why are the characters “\:*?<>|” prohibited in file names in the Windows operating system? (1 Mark)
5. Define and differentiate between RAM and ROM. (2 Marks)
6. Convert the following Binary to Decimal. (2 Marks)
 - a. 10010
 - b. 01001100
7. Convert the following Decimal to Binary. (2 Marks)
 - a. 21
 - b. 90
8. Explain the difference between a Hard Disk Drive (HDD) and a Solid-State Drive (SSD) in terms of speed and durability. (2 Marks)
9. Differentiate between a File and a Folder by providing examples of each with file extension and folder names. (3 Marks)
10. List three advantages of RFID technology over barcode technology. (3 Marks)

11. Identify the purpose of each of the following types of utility programs and provide examples of each. (4 Marks)
- a. Antivirus program
 - b. Uninstall utility
 - c. File management program
 - d. File compression program
12. Explain what a computer virus is and define the purpose of a Trojan Horse, Malware and Worms. (2 Marks)
13. What is the primary function of an uninterruptible power supply (UPS) in a PC setup? (1 Mark)
14. Explain the significance of incorporating graphs in spreadsheet software for data analysis. Furthermore, outline the essential features that should be integrated into graphs. (2 Marks)
15. List and explain each phase in the Program Development Life Cycle. (5 Marks)
16. Draw a flowchart for the following situation: Input the email, input the password, if the email and password entered are incorrect then the message output should be "Incorrect login". If the email and password are correct then the message output should be "Login successful". (5 Marks)

The End