



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



SCHOOL OF SCIENCE AND TECHNOLOGY

Semester 1, 2026

FINAL EXAMINATION PAPER

CSAF11: COMPUTER FOUNDATION I

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 paper contains two (2) sections A and B. All questions are compulsory to answer.
6. Write all your answers legibly. The marker has the right to award zero for answers that are not legible.
7. 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):

<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	1-17	Open-Ended Questions	70	126 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. A smart thermostat that automatically adjusts room temperature based on user behaviour is an example of:
 - A. Virtual Reality
 - B. Embedded computing and IoT
 - C. Green computing
 - D. Enterprise computing
2. A hospital uses robotic arms to assist surgeons during complex operations. This is an example of:
 - A. Artificial Intelligence only
 - B. Virtual Reality
 - C. Robotics improving productivity
 - D. Green computing
3. A mobile app that converts spoken commands into text and performs tasks (e.g., Siri or Google Assistant) mainly uses:
 - A. Integrated circuits
 - B. Natural language processing
 - C. Embedded systems
 - D. Virtual reality
4. A company allows employees to work from home using cloud systems and personal laptops. This practice is best described as:
 - A. Enterprise computing
 - B. Telecommuting with BYOD
 - C. Artificial intelligence
 - D. Green computing
5. A student uses an LMS to submit assignments, take quizzes, and communicate with lecturers. This demonstrates:
 - A. IoT usage
 - B. Technology in transportation
 - C. Technology in higher education
 - D. Embedded computing
6. A URL such as <http://www.example.com/index.html> contains multiple parts. Which component identifies how data is transferred?
 - A. Server address
 - B. Pathname
 - C. Protocol (HTTP)
 - D. File name

7. A website ending with “.edu” is most likely used by:
 - A. Commercial businesses
 - B. Government agencies
 - C. Educational institutions
 - D. Non-profit organizations
8. A user sees a lock icon and “HTTPS” in the browser before entering credit card details. This indicates:
 - A. The website loads faster
 - B. The website uses encryption for security
 - C. The website is free to use
 - D. The website is offline
9. A student searches “AI in education” but gets too many results. Which strategy would BEST refine the search?
 - A. Use broader keywords
 - B. Add quotation marks “AI in education”
 - C. Remove keywords
 - D. Use only one word
10. A company purchasing goods from another company through an online platform is an example of:
 - A. B2C e-commerce
 - B. C2C e-commerce
 - C. B2B e-commerce
 - D. Government e-commerce
11. A computer component that processes data and converts it into meaningful information is the:
 - A. RAM
 - B. CPU
 - C. Hard drive
 - D. Input device
12. A user wants fast storage with no moving parts for better performance. Which storage device is MOST suitable?
 - A. HDD
 - B. Optical disc
 - C. Solid State Drive (SSD)
 - D. Magnetic tape
13. A designer uses a stylus on a tablet to draw directly on the screen. This device is categorized as:
 - A. Output device
 - B. Storage device
 - C. Input device
 - D. Processing device

14. A company selects a computer that meets the highest requirements among all required software. This decision is based on:
- A. Form factor
 - B. Add-on devices
 - C. Hardware specification requirements
 - D. Platform compatibility only
15. A user installs an application that allows multiple operating systems to run on a single machine simultaneously. This setup is known as:
- A. Dual booting
 - B. Virtual machine
 - C. Multitasking
 - D. File partitioning
16. During system startup, the computer runs a program that checks hardware components before loading the OS. This program is called:
- A. Kernel
 - B. Utility software
 - C. Bootstrap program
 - D. Device driver
17. A user notices their computer is slow due to too many programs running. Which OS function is MOST directly responsible for managing this?
- A. File management
 - B. Memory management
 - C. Device configuration
 - D. Internet connectivity
18. A file named "report.docx" contains information about its type in which part?
- A. File name
 - B. File location
 - C. File extension
 - D. File size
19. A user compresses a folder before emailing it. What is the primary reason for doing this?
- A. Increase file quality
 - B. Reduce file size for transfer
 - C. Change file format permanently
 - D. Improve security automatically

20. A user accesses Google Docs through a browser without installing any software. This is an example of:
- A. Native application
 - B. Portable application
 - C. Web application
 - D. Device management app
21. A graphic designer uses software that stores images using mathematical formulas instead of pixels. This type of image is:
- A. Bitmap image
 - B. Raster image
 - C. Vector graphic
 - D. Compressed image
22. A spreadsheet automatically recalculates values when data in a cell changes. This feature is due to:
- A. Formatting tools
 - B. Functions and formulas
 - C. Database queries
 - D. Presentation layouts
23. A company stores documents online so multiple employees can edit them simultaneously. This demonstrates:
- A. Local application usage
 - B. Device management
 - C. Cloud-based collaboration
 - D. Offline processing
24. In database systems, what is used to retrieve specific data based on conditions?
- A. Form
 - B. Table
 - C. Query
 - D. Field
25. A hacker tricks a user into entering login credentials on a fake banking website. This is an example of:
- A. Malware attack
 - B. Phishing (social engineering)
 - C. Ransomware
 - D. Encryption
26. A user experiences wrist pain after typing for long hours without breaks. This condition is best described as:
- A. Cyberstalking
 - B. RSI (Repetitive Strain Injury)
 - C. Malware infection
 - D. Environmental hazard

27. Which of the following BEST describes encryption?
- A. Deleting data permanently
 - B. Compressing files to save space
 - C. Scrambling data so it cannot be read without a key
 - D. Copying files to another device
28. A company implements a system where employees enter a password and then a code sent to their phone. This is known as:
- A. Biometric authentication
 - B. Firewall protection
 - C. Two-factor authentication
 - D. Data backup
29. A user connects to public Wi-Fi and performs online banking without precautions. What is the MOST likely risk?
- A. Hardware failure
 - B. Data interception or theft
 - C. Faster internet speed
 - D. Improved security
30. Which of the following is the MOST effective way to reduce the risk of identity theft?
- A. Using public Wi-Fi for transactions
 - B. Sharing personal details only with friends
 - C. Regularly monitoring financial statements and shredding sensitive documents
 - D. Saving all passwords in a text file on your computer

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

1. Explain how digital technology has changed the way people learn, work, and communicate. 4 marks
2. Describe the role of Artificial Intelligence (AI) in everyday life and give two practical examples. 4 marks
3. Describe how information literacy helps students conduct safe and reliable online research. 4 marks
4. Explain the main functions of the CPU, RAM, and storage devices in a computer system. 4 marks
5. Compare input devices and output devices, using two examples of each. 4 marks
6. Explain the purpose of an operating system and how it helps users interact with hardware. 4 marks
7. Explain the difference between system software and application software with examples. 4 marks
8. Compare native apps, web apps, and mobile apps. 4 marks
9. Explain the physical, social, and behavioural health risks associated with computer use. 4 marks
10. Explain the purpose of HTML, CSS, and JavaScript in website development. 4 marks
11. Explain how a computer network works and why networks are important. 4 marks
12. Explain the importance of digital communication in education and business. 4 marks
13. Compare blogs, wikis, and social networking platforms. 4 marks
14. Explain cloud computing and compare public cloud and private cloud. 4 marks
15. Describe how e-commerce has changed the way businesses operate. 4 marks
16. Explain the advantages and challenges of using AI technologies in society. 4 marks
17. Compare LAN, WAN, PAN, and explain two topologies with practical examples. 6 marks

End of Exam