

The University of Fiji

School of Science and Technology

Department of Computer Science/ Information Technology

ITC100

Information Technology for the Workplace

Semester 2, 2012

FINAL EXAMINATION

QUESTION PAPER & SOLUTIONS

Time Allowed: 3 Hours [10 Minutes Extra Allowed For Reading the Paper]
Weighting: 50%
Total Marks: 100 marks.

Section A	30 multiple choice questions	30 marks
Section B	10 Matching	10 marks
Section C	22 Short Answer/descriptive questions	60 marks

Instructions

- Show your answers clearly in each question to gain maximum marks.
- Answer multiple choice questions in the Multiple-Choice Grid provided.
- You may ask for extra sheets from the supervisors if the need arises.
- Do not forget to write your name and ID number on all the extra sheet(s) attached.
- Programmable calculators are not allowed.

Section A: Multiple Choice (30 Marks)

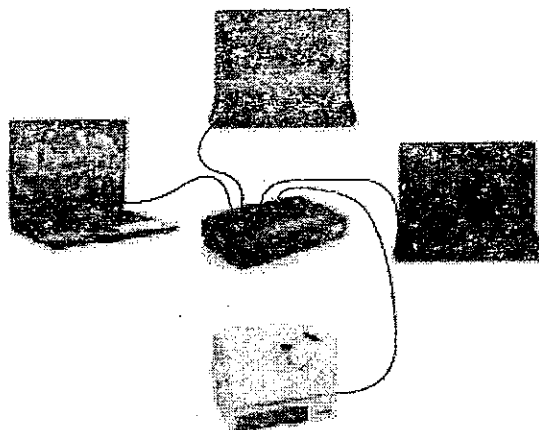
Identify the choice that best completes the statement or answers the question.

1. In the early 1980s, things began to change. ____ were invented and computer use increased dramatically.
 - A. Printers
 - B. Networks
 - C. Microcomputers
 - D. Computers
2. Two of the most common types of communications hardware are ____ and network adapters.
 - A. ports
 - B. slide rules
 - C. monitors
 - D. modems
3. Ultra-mobile PCs are also called ____.
 - A. mini computers
 - B. handheld computers
 - C. range computers
 - D. frame computers
4. The numbering system we commonly use is called the decimal numbering system because it uses ____ symbols to represent all possible numbers.
 - A. 2
 - B. 5
 - C. 10
 - D. 16
5. One measurement of the speed of a CPU is the ____, which is rated in megahertz (MHz) or gigahertz (GHz).
 - A. System speed
 - B. CPU clock speed
 - C. System rpm
 - D. CPU rpm
6. Most network cards contain a port that accepts a(n) ____, which looks similar to a telephone connector but is larger.
 - A. RJ-11 connector
 - B. RJ-12 connector
 - C. RJ-25 connector
 - D. RJ-45 connector

7. A storage medium is inserted into the appropriate _____ to be read from or written to.
- A. Storage processor
 - B. Bay
 - C. Board
 - D. Storage device
8. Each hard disk is divided into pie-shaped groups of _____.
- A. tracks
 - B. clusters
 - C. files
 - D. sectors
9. The recommended file system for computers running current versions of Windows is _____.
- A. FAT
 - B. FAT32
 - C. NTFS
 - D. FAT64
10. A(n) _____ keyboard folds or rolls up and connects to a device via a wired or wireless connection when needed.
- A. slide-out
 - B. portable
 - C. MIDI
 - D. On-screen
11. _____ are used to input data about a person into a computer system so that the individual can be identified based on a particular unique physiological characteristic.
- A. Biometric readers
 - B. RFID tags
 - C. MICR readers
 - D. OMRs
12. The number of bits used to store color information about each pixel is called _____.
- A. bit depth
 - B. color concentration
 - C. pixel depth
 - D. byte resolution
13. _____ software consists of the operating system and utility programs that control a computer system and allow you to use your computer.
- A. background
 - B. front-end
 - C. application
 - D. system

14. Most operating systems have security features available, such as an option to automatically download and install ____ from the operating system's manufacturer on a regular basis.
- A. security walls
 - B. device patches
 - C. security patches
 - D. device drivers
15. ____ was originally developed in the late 1960s at AT&T Bell Laboratories as an operating system for midrange servers.
- A. Linux
 - B. Unix
 - C. Solaris
 - D. Mac OS X
16. There are four basic categories of software: commercial software, shareware, freeware, and ____.
- A. publish software
 - B. public domain software
 - C. advertising software
 - D. licensed software
17. Businesses and many individuals often use office suites, sometimes called ____, to produce written documents.
- A. integral suites
 - B. productivity software suites
 - C. mid-range suites
 - D. corporate suites
18. A(n) ____ is a named, preprogrammed formula, such as to compute the average of a group of cells or calculate a mortgage payment amount.
- A. argument
 - B. label
 - C. cell
 - D. function
19. In ____ transmission, data can move in both directions at the same time, such as with a telephone.
- A. full-duplex
 - B. full-simplex
 - C. half-simplex
 - D. half-duplex

20. The accompanying figure shows a ____ network.



- A. star
 - B. ring
 - C. bus
 - D. mesh
21. ____ is a wireless standard that is designed for very short-range (10 meters, approximately 33 feet, or less) connections.
- A. IrDA
 - B. xMax
 - C. Wi-Fi
 - D. Bluetooth
22. ____ generally refers to applications and services that use the Web as a platform to deliver rich applications that enable people to collaborate, socialize, and share information online.
- A. Web X
 - B. Web Y
 - C. Web 1.0
 - D. Web 2.0
23. ____ is a new alternative for homes and businesses today in areas where there is fiber optic cabling available all the way to the building.
- A. T1
 - B. DSL
 - C. ISDN
 - D. BoF

24. Common online investing services include the ability to set up a(n) _____ that displays the status of the stocks you specify.
- A. online portfolio
 - B. stock account
 - C. online recorder
 - D. e-tailer
25. _____ occurs whenever an individual gains access to a computer, network, file, or other resource without permission.
- A. Spoofing
 - B. Unauthorized Access
 - C. Phishing
 - D. Vandalizing
26. A computer _____ spreads by creating copies of its code and sending those copies to other computers via a network.
- A. virus
 - B. software
 - C. worm
 - D. hacker
27. For Web pages, the _____ or PNG format is usually selected for line art, such as clip art, logos, navigation buttons, and so forth.
- A. TIF
 - B. GIF
 - C. MP3
 - D. BMP
28. When a markup language is used, markup _____ are inserted around the Web page content to identify where elements are to be displayed and how they should look when displayed.
- A. tags
 - B. divisions
 - C. identifiers
 - D. boxes
29. Companies that follow the _____ do not sell goods or services directly to others, but instead bring buyers and sellers together within a specific industry or business process.
- A. business-to-government (B2G) model
 - B. person-to-person (P2P) model
 - C. business-to-business (B2B) model
 - D. intermediary hub model



30. The figure above shows a ____ seal.
- A. privacy
 - B. trust
 - C. security
 - D. warranty

Section B – True/False [10 marks]

Write either True or False for each question number in the answer booklet.

- 31. 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.
- 32. The binary numbering system uses only two symbols—the digits 0 and 1—to represent all possible numbers.
- 33. With rewritable optical media, the laser permanently alters the disc surface.
- 34. A graphics tablet is also called a digitizing tablet.
- 35. 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.
- 36. Spreadsheet templates are available to help users quickly create common types of business documents, such as balance sheets, income statements, invoices, and purchase orders.
- 37. GPS receivers are commonly used by individuals to determine their geographic location while hiking and to obtain driving directions while traveling.
- 38. Application service providers (ASPs) supply the information that is available through the Internet.
- 39. Wi-Fi security features work by default.
- 40. The HTML tag `<b>` turns bolding on for the text that follows the tag until the `</b>` tag is reached.

Section C – Short Answer/Descriptive questions [60 marks]

Chapter 1

41. Define the four primary operations of the computer. [4 marks]
42. Compare embedded computers and supercomputers. [2 marks]

Chapter 2

43. What is one important difference between ROM (read-only memory) and RAM (random access memory)? [2 marks]
44. What are the general operations a machine cycle consists of? [4 marks]

Chapter 3

45. Explain why CD-ROM discs are not erasable, but CD+RW discs are. [2 marks]
46. What is the total time a hard drive takes to read or write data called, and what are the steps it requires? [1+3 marks]

Chapter 4

47. Describe the common features and unique benefits of trackballs. [4 marks]
48. How do digital cameras work? [2 marks]

Chapter 5

49. Compare graphical user interfaces (GUIs) with command line interfaces

[3 marks]

50. What is the purpose of uninstall utilities?

[3 marks]

Chapter 6

51. What programs are typically contained in office suites? Discuss three.

[3 marks]

52. Refer to the spreadsheet below and answer questions that follow.

E14		fx				
	A	B	C	D	E	F
1				Vat Rate	12.50%	
2						
3	Items	Price (Excluding VAT)	VAT	Price Inc. VAT		
4	20GB Hard Disk	\$40.00	\$5.00	\$45.00		
5	40GB Hard Disk	\$80.00	\$10.00	\$90.00		
6	256MB DDR RAM	\$125.00	\$15.63	\$140.63		
7	512MB DDR RAM	\$200.00	\$25.00	\$225.00		
8	Lexmark Z23 Colour Printer	\$92.00	\$11.50	\$103.50		
9	Canon i100 Colour Printer	\$90.00	\$11.25	\$101.25		
10	HP 1010 Laser Printer	\$195.99	\$24.50	\$220.49		
11	HP 1200 Scanner	\$180.85	\$22.61	\$203.46		
12	Microsoft Encarta	\$99.95	\$12.49	\$112.44		
13	Microsoft Works Suite	\$155.99	\$19.50	\$175.49		
14	Age of Empires Games CD	\$99.95	\$12.49	\$112.44		
15						
16						
17						

a. What key combination will you press to move the cursor directly to cell A1?

[1 mark]

b. What formatting has been applied to values?

[1 mark]

c. Write the formula used in cell D4.

[1 mark]

Chapter 7

53. List three common uses computer networks. [3 marks]

54. Explain the difference between Wi-Fi and Bluetooth, including speed, range, and the purpose of each networking standard. [1 ½ + 1 ½ marks]

Chapter 8

55. Explain the difference between a blog, a wiki, and a podcast. [3 marks]

56. What would the following search look for?
*tower [2 marks]

Chapter 9

57. Supply the missing words to complete the following statement regarding public / private key pairs:

With an encrypted email message, the recipient's _____ key is used to encrypt the message, and the recipient's _____ key is used to decrypt the message [1 mark]

58. List two precautions that individuals can take to secure a wireless router against unauthorized access. [2 marks]

Chapter 10

59. List three types of software programs that might be used when creating a multimedia web site. Explain what each program will be used for and list one example (program name and publisher) of each. [3 marks]

Chapter 11

60. List two potential advantages of e-commerce for a business.

[2 marks]

Chapter 15

61. List two precautions that can be taken while travelling with a portable computer to guard against its theft.

[2 marks]

Chapter 16

62. List three possible negative physical effects that can result from computer use and describe one way to lessen each effect.

[3 marks]

The End

