

THE UNIVERSITY OF AUCKLAND

SECOND SEMESTER, 2015

Campus: City

COMPUTER SCIENCE

An Introduction to Practical Computing

TEST

(Time Allowed: ONE HOUR)

- NOTE:**
- Calculators are NOT permitted.
 - Compare the test version number on the Teleform sheet supplied with the version number above. If they do not match, ask the test supervisor for a new sheet.
 - Enter your name and Student ID (in pencil) on the Teleform sheet. Your name and Student Id should both be entered left aligned. If your name is longer than the number of boxes provided, truncate it.
 - Answer all questions on the Teleform answer sheet provided.
 - Use a dark pencil to shade in your answers in the multiple choice answer boxes on the Teleform sheet. Check that the question number on the sheet corresponds to the question number in this question book. If you spoil your sheet, ask the supervisor for a replacement.
 - Each question is worth 2.5 marks. There are 40 questions.

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MULTIPLE CHOICE QUESTIONS

For each question, choose the best answer according to the information presented in lectures. Select your preferred answer on the Teleform answer sheet by shading in the appropriate box in pencil. There are 40 questions. Each question is worth 2.5 marks.

Question 1

[2.5 marks] Which of the following hardware allows the fastest access to information?

- (a) Solid State Drive.
- (b) Optical Drive.
- (c) Hard Disk Drive.
- (d) RAM.

Question 2

[2.5 marks] All of the following components can always be found inside a system unit EXCEPT FOR ...

- (a) a Solid State Drive.
- (b) RAM.
- (c) a motherboard.
- (d) a CPU.

Question 3

[2.5 marks] In a supercomputer, speed is measured in terms of:

- (a) kWh.
- (b) PFLOPS.
- (c) MHz.
- (d) MIPS.

Question 4

[2.5 marks] What is the main function of a motherboard?

- (a) To perform arithmetic and logic operations.
- (b) To store and retrieve digital information.
- (c) To remove the waste heat produced by computer components.
- (d) To connect the crucial electronic components of the computer together.

Question 5

[2.5 marks] What is the decimal representation of the number represented in binary as 10101?

- (a) 13
- (b) 33
- (c) 21
- (d) 11

Question 6

[2.5 marks] Which of the following lists goes from largest to smallest?

- (a) 1KiB, 1GiB, 1KB, 1MiB.
- (b) 1MiB, 1MB, 1KiB, 1KB.
- (c) 1GiB, 1KB, 1KiB, 1MiB.
- (d) 1KB, 1KiB, 1MB, 1MiB.

Question 7

[2.5 marks] Which of the following is equal to 1,073,741,824 bytes?

- (a) 1gibibyte.
- (b) 1mebibyte.
- (c) 1tebibyte.
- (d) 1pebibyte.

Question 8

[2.5 marks] What is the binary representation of the number represented in decimal as 13?

- (a) 1011
- (b) 101
- (c) 1101
- (d) 1111

Question 9

[2.5 marks] Which of the following technologies is NOT open standard?

- (a) Adobe Flash.
- (b) HTML.
- (c) PDF.
- (d) CSS.

Question 10

[2.5 marks] Which of the following is NOT an Operating System?

- (a) Ubuntu Linux.
- (b) Android.
- (c) Internet Explorer.
- (d) Microsoft DOS.

Question 11

[2.5 marks] When would a person use GNU General Public Licence for their software?

- (a) When they want to start charging users a fee to use their software.
- (b) When they want to ensure that the copyright of their source code is maintained.
- (c) When they want to give permission to users to view the source code but to stop them from changing the source code.
- (d) When they want to allow users to modify the source code and distribute any derivative work that is produced.

Question 12

[2.5 marks] What is Spyware?

- (a) Software that aims to gather information about a person without their knowledge, and that may send such information to another entity.
- (b) Legitimate software that allows company administrators to monitor and supervise all their employee computers from a central location.
- (c) Software used to disrupt computer operation or gain access to private computer systems.
- (d) A computer program hidden within another seemingly harmless program that produces copies of itself and inserts them into other programs or files.

Question 13

[2.5 marks] Which digital networking communications method groups all transmitted data into suitably sized blocks which are transmitted via a medium that may be shared by multiple simultaneous communication sessions?

- (a) Circuit switching.
- (b) Time-driven switching.
- (c) Packet switching.
- (d) Message switching.

Question 14

[2.5 marks] Which standard network protocol is used to transfer computer files from one host to another host over the Internet?

- (a) FTP.
- (b) TCP/IP.
- (c) UDP.
- (d) HTTP.

Question 15

[2.5 marks] Which of the following lists contains events in chronological order from earliest to latest?

- (a) ARPA formed, Sputnik launched, DNS created, ARPANET created.
- (b) TCP/IP created, ARPA formed, ARPANET created, DNS created.
- (c) TCP/IP created, ARPA formed, DNS created, ARPANET created.
- (d) Sputnik launched, ARPANET created, TCP/IP created, NZ joins Internet.

Question 16

[2.5 marks] Which of the following is a computer network that operates within a 1km radius?

- (a) MAN.
- (b) LAN.
- (c) WAN.
- (d) IAN.

Question 17

[2.5 marks] If you want to ensure that your email client just shows the messages that are on the server and downloads them on demand, while still keeping a copy of the message on the server, what protocol should you be using?

- (a) IMAP.
- (b) SMTP.
- (c) ISP.
- (d) POP3.

Question 18

[2.5 marks] Why would Bcc be used in an email?

- (a) Bcc allows the recipient to identify all the other recipients in the list when a group email address is used.
- (b) Bcc allows the sender to indicate who the email is for if there is more than one recipient.
- (c) Bcc allows the sender of a message to conceal the recipient entered in the Bcc field from the other recipients.
- (d) Bcc allows recipients to be visible to all other recipients of the message.

Question 19

[2.5 marks] Which of the following pairs of communication technologies BOTH use asynchronous communication?

- (a) Forums and video conferencing.
- (b) Email and forums.
- (c) Instant messaging and forums.
- (d) Email and instant messaging.

Question 20

[2.5 marks] Which of the following statements about Wikipedia is FALSE ?

- (a) The articles in Wikipedia often provide links designed to guide the user to related pages with additional information.
- (b) Wikipedia is written collaboratively by largely anonymous volunteers who write without pay.
- (c) Wikipedia has a very high publishing cost for adding or expanding entries compared to a traditional paper based encyclopaedia.
- (d) Wikipedia is a multilingual, web-based, free-content encyclopaedia project.

Question 21

[2.5 marks] Which of the following symbols is used to create an ordered list in the Stage One Wiki?

- (a) #
- (b) *
- (c) ?
- (d) \$

Question 22

[2.5 marks] What is microblogging?

- (a) A blog written via a mobile device like a mobile phone or PDA.
- (b) An ongoing commentary written by an individual.
- (c) A type of weblog in which posts are written and published by more than one author.
- (d) A practice of posting small pieces of content on the Internet through systems such as Twitter.

Question 23

[2.5 marks] Which of the following is NOT a search engine?

- (a) Bing.
- (b) Mozilla Firefox.
- (c) Google.
- (d) DuckDuckGo.

Question 24

[2.5 marks] Which one of the following lists has the events in the correct chronological order, from earliest to latest?

- (a) WWW created, Mosaic created, Yahoo! formed, Google founded.
- (b) WWW created, Mosaic created, Microsoft Internet Explorer formed, Yahoo! formed.
- (c) Mosaic created, Yahoo! formed, Netscape Communication formed, Google founded.
- (d) WWW created, Mozilla formed, Netscape Communication formed, Google founded.

Question 25

[2.5 marks] Which of the following statements about search engines is FALSE?

- (a) A search engine is a software system that is designed to search for information on the WWW.
- (b) Search engines analyse the contents of web pages to determine how they should be indexed.
- (c) Most search engines use web crawlers to systematically browse the WWW.
- (d) Search engines are also known as web browsers.

Question 26

[2.5 marks] Which of the following is a communications protocol for secure communication over the Web?

- (a) HTTP.
- (b) FTP.
- (c) HTTPS.
- (d) WWW.

Question 27

[2.5 marks] Which of the following is NOT a cloud-based storage service?

- (a) Brilllos.
- (b) SugarSync.
- (c) SkyDrive.
- (d) Google Drive.

Question 28

[2.5 marks] Which of the following statements regarding the Copyright (New Technologies) Amendment Act 2008 No 27 is FALSE?

- (a) It allows format shifting (1 copy of music per player).
- (b) It allows time-shifting.
- (c) It allows transient copying.
- (d) It allows multiple copies of music to be made and shared.

Question 29

[2.5 marks] What is BitTorrent?

- (a) A digital distribution for the delivery or distribution of media content.
- (b) A protocol that helps downloaders to be able to become uploaders more quickly.
- (c) A protocol for the practice of peer-to-peer file sharing that is used to distribute large amounts of data over the Internet.
- (d) A technique for improving the speed at which peer-to-peer file sharing and content distribution systems can share data.

Question 30

[2.5 marks] What is the function of ICANN?

- (a) Responsible for the databases of unique identifiers related to the namespaces of the Internet, and ensuring the network's stable and secure operation.
- (b) Responsible for the monitoring of illegal activities on the Internet.
- (c) Responsible for solving the disagreements and complaints lodged due to the misuse of the Internet.
- (d) Responsible for the database of the current protocols and standards available for the Internet.

Question 31

[2.5 marks] What are the ASCII codes that represent the word DOG?

- (a) 65 74 68
- (b) 68 79 71
- (c) 65 77 81
- (d) 88 77 65

Question 32

[2.5 marks] Which of the following is NOT WYSIWYG?

- (a) LaTeX.
- (b) Open Office Writer.
- (c) Microsoft Word.
- (d) WordStar.

Question 33

[2.5 marks] Which of the following is NOT a benefit of using styles in Microsoft Word?

- (a) Modifying a style affects all text that uses that style.
- (b) Ensures that the colour scheme used is pleasant to the user.
- (c) Can apply many changes at once.
- (d) Appearance is consistent.

Question 34

[2.5 marks] Which of the following was NOT invented at PARC?

- (a) Laser printer.
- (b) Ethernet.
- (c) 8080 Micro-processor.
- (d) Smalltalk.

Question 35

[2.5 marks] Lotus 1-2-3 was based on ...

- (a) InterPress.
- (b) VisiCalc.
- (c) DOS.
- (d) BIOS.

Question 36

[2.5 marks] Which of the following lists contains events in chronological order from earliest to latest?

- (a) Portable Document Format developed, PostScript developed, InterPress developed.
- (b) InterPress developed, Portable Document Format developed, PostScript developed.
- (c) PostScript developed, InterPress developed, Portable Document Format developed.
- (d) InterPress developed, PostScript developed, Portable Document Format developed.

Question 37

[2.5 marks] In text processing, the term LaTeX is derived from ...

- (a) Lamport TeX.
- (b) Labelled TeX.
- (c) Lazy TeX.
- (d) Layout TeX.

Question 38

[2.5 marks] Which of the following is NOT a reason to use LaTeX instead of Microsoft Word when preparing a scientific document?

- (a) The user's focus on structure, rather than layout, makes a better document.
- (b) LaTeX is better than Word at typesetting mathematical expressions.
- (c) LaTeX is free and runs on many platforms.
- (d) LaTeX has more fonts than Word.

Question 39

[2.5 marks] With regards to LaTeX, which of the following statements is FALSE?

- (a) Putting `\bfseries` right after the `\documentclass` declaration makes the entire text boldface.
- (b) Putting `\itshape` right after the `\begin{document}` declaration makes the entire text italics.
- (c) Putting `\bfseries` right after the `\begin{document}` declaration makes the entire text boldface.
- (d) The command `"\begin{bfseries} Cats \end{bfseries} and Dogs"` makes "Cats" boldface.

Question 40

[2.5 marks] Which of the following commands produces the text "CATS AND DOGS" in small capitals?

- (a) `\texttt{Cats and dogs}`
- (b) `{\textsc Cats and dogs}`
- (c) `\textsc{Cats and dogs}`
- (d) `{\texttt Cats and dogs}`

Rough Working – This page will not be marked

