

PRIFYSGOL CYMRU; UNIVERSITY OF WALES

DEGREE EXAMINATIONS JANUARY 2003

SWANSEA

Computer Science

CS 101 Computing Skills

Student number: _____

Name: _____

Please read these instructions carefully:

- Please complete your **name** and **student number** above
- Attempt **all questions**
- Mark your choices with a circle around the appropriate letter **on this question sheet**
- Each question has only **one correct answer**

Time allowed: 1 hour 30 minutes

Students are permitted to use the dictionaries provided by the University

Students are NOT permitted to use calculators

CS_101
COMPUTING SKILLS
(Attempt all questions)

Mark your choices with a circle around the appropriate letter on this question sheet.
Each question has only one correct answer.

1. What is the main characteristic of *Von Neumann* computers?
 - A. They have *drives* named 'a' and 'c'.
 - B. Program execution is sequential with data and instructions stored in read-write memory
 - C. They have a keyboard, processor and monitor.
 - D. They can all multi-task programs using a graphical interface

2. Which of the following is correctly ranked in *ascending* order of memory capacity?
 - A. 1Gb, 2Mb, 1024Kb, 256 bits.
 - B. 500 bits, 256b bytes, 1512Kb, 2Mb.
 - C. 56Kb, 96Kb, 1 bit, 1Gb.
 - D. 128Kb, 300 bits, 1mb, 2mb.

3. Which of the following best defines what *cache* is?
 - A. A way of using *external storage* to run more programs simultaneously.
 - B. Very high capacity memory used to perform back-ups.
 - C. A small but fast type of memory.
 - D. A new type of floppy disk.

4. Which of the following is true?
 - A. All 200Mhz processors run programs faster than all 100Mhz processors.
 - B. All processors work with the same *software*.
 - C. "128-bit processors" is a new technology developed by MIPS
 - D. A 100Mhz processor has 100 million clock cycles per second.


5. What is the essential difference between high-level and low-level (assembly) programming languages?
- A. High-level languages are problem oriented, and low-level languages are machine oriented.
 - B. High-level languages are used to write programs such as word-processors, and low-level languages are used to write operating systems.
 - C. High-level languages use new programming *paradigms*, and replaced low-level languages in the 1980s.
 - D. High-level programming languages work with graphical interfaces, and low-level languages work with command line interfaces.
6. Java, Ada, C and Pascal are examples of
- A. Programming languages?
 - B. Word processors?
 - C. Graphical user interfaces?
 - D. Operating systems?
7. RiscOS, Windows 2000 and Unix are examples of
- A. Command line interfaces?
 - B. Graphical user interfaces?
 - C. Microsoft programs?
 - D. Operating systems?
8. Which of the following is the best (most secure) choice for a password.
- A. Your last name, for example, 'Jones'.
 - B. Your telephone number, for example, '553213'.
 - C. A randomly picked word, for example, 'ardvark'.
 - D. A made up word, for example, 'Gm4k1i3r'.
9. On the University of Wales Swansea P.C. network, work saved on the 'c' drive is
- A. Accessible throughout the University?
 - B. Unrecoverable?
 - C. Local to one computer?
 - D. Stored using a floppy disk?
10. Virtual memory is
- A. Quicker than ordinary memory?
 - B. Another name for the Internet?
 - C. Caused by computer viruses?
 - D. Auxiliary memory inside a disk cache?

11. Hard disks are

- A. Relatively slow and unreliable but cheap and portable?
- B. Fixed large capacity magnetic drives?
- C. Able to store more data than magnetic tapes?
- D. An example of read only memory?

12. Which of the following is *not* a reliable method of backing-up a Word document?

- A. E-mailing yourself the file as an *attachment*.
- B. Using the 'Copy to...' option in the file manager.
- C. Using the 'Save as...' option in the file menu of Word.
- D. The MS-DOS command "copy".

13. The button  performs which *windows* operation?

- A. Minimize
- B. Maximize
- C. Restore
- D. Close

14. Which does the  icon represent in Windows?

- A. Windows Explorer
- B. Microsoft Excel
- C. Internet Explorer
- D. Control Panel

15. Directories are

- A. Used to organise the storage of files?
- B. Used to carry out keyword searches on the Internet?
- C. Another name for windows?
- D. Another name for pull-down menus?

16. Opera, Netscape and Explorer are examples of

- A. Programming packages
- B. Presentation software
- C. Drawing programs
- D. Web browsers

17. The first GUI was developed by

- A. Microsoft
- B. Apple
- C. Xerox
- D. Commodore

18. TCP/IP and HTTP are examples of

- A. LANs (Local Area Networks)?
- B. Point-to-point networks?
- C. Communication protocols?
- D. Web browsers?

19. A system of programs and data structures that approximates the operation of the human brain is called

- A. Nanotechnology
- B. Artificial Intelligence
- C. Neural Network
- D. Biological computers

20. Which of the following is *not* true?

- A. HTML was the first ever markup language.
- B. LaTeX is a markup language.
- C. Markup languages embed instructions within a document.
- D. Markup may be semantic or physical.

21. Which of the following is *not* an advantage of semantic markup?

- A. It makes it easier to include complex equations and symbols.
- B. It facilitates the use of different types of media.
- C. Documents are more 'portable'.
- D. One can accurately control the position of text.

22. In Excel, to enter the fraction $\frac{1}{2}$ into a cell, which of the following should you type?

- A. "1/2"
- B. "0.5"
- C. "0 1/2"
- D. "1 over 2"

23. If you correctly entered the Excel formula =4%+6 what would appear in the cell?

- A. 10
- B. An error message.
- C. 6.4
- D. 604%

24. Consider the following fragment of an Excel spreadsheet.

	SUM				
		✖	✔	=	=SUM(A1:C1)
	A	B	C	D	
1	1	2	3	4	
2	5	6	7	8	
3	=SUM(A1:C1)				
4					

If cell A3 (having the value 6) were copied (using copy and an ordinary paste) to cell B4, what value would then be displayed in cell B3?

- A. An error message.
- B. 6, =sum(A1:C1)
- C. 30, =sum(B1:D1)
- D. 21, =sum(B2:D2)

25. Which of the following correctly marks (with x 's) the cells referenced by the expression "A1:B1, A2 ,D2, B4"?

- A.
- | | A | B | C | D |
|---|---|---|---|---|
| 1 | x | | | |
| 2 | | | | x |
| 3 | | | | |
| 4 | | x | | |
- B.
- | | A | B | C | D |
|---|---|---|---|---|
| 1 | x | x | | |
| 2 | x | x | x | x |
| 3 | | x | | |
| 4 | | x | | |
- C.
- | | A | B | C | D |
|---|---|---|---|---|
| 1 | x | x | | |
| 2 | x | | | x |
| 3 | | | | |
| 4 | | x | | |
- D.
- | | A | B | C | D |
|---|---|---|---|---|
| 1 | x | x | | |
| 2 | x | | x | x |
| 3 | | x | | |
| 4 | | x | | |