

Undergraduate Modular Programme

UFCE47-20-1 - Systems Development

Date: TBA

Time: TBA

Time allowed: 1.5 hours (NO READING TIME ALLOWED)

Instructions to candidates:

1. Answer all 50 questions
2. Read each question carefully - each question is worth 2 marks
3. Select ONE answer from the four alternatives which most accurately answers the question
4. Use this question paper for jotting and then indicate your answers on the EDPAC Answer Sheet. To minimise mistakes, the EDPAC Answer Sheet will not be issued until 10 minutes before the end of the test. Consequently, you are not allowed to leave the test early.
5. Candidates are NOT permitted to remove this paper from the examination room
6. No books or folders may be taken into the examination
Approved calculators may be taken into the examination
- 7.

Instructions for filling in the EDPAC Answer sheet

1. Use the HB pencil supplied on your desk.
2. Fill in your name, number and subject information, as shown on the example answer sheet overleaf.
3. Indicate your answer on the EDPAC Answer Sheet, marking with a horizontal line through the selected letter for each question. You must mark an answer, even if it is just option (e) "I don't know".
4. Do not make any other marks on the EDPAC answer sheet. If you make a mistake, ask for another EDPAC Answer Sheet.

Special materials:

1. EDPAC Answer Sheet [issued 10 minutes before the end of the test]
2. HB Pencils

Examiner: Julian Webbn

- 1 Which of these methods is used to pass information to a CGI program?
- (A) PUT
 - (B) SET
 - (C) READ
 - (D) GET
- 2 CGI programs are NOT used for:
- (A) Search engines
 - (B) Applets
 - (C) Shopping baskets
 - (D) Visitor counters
- 3 On an e-commerce shopping site it is important to:
- (A) Provide plenty of large images
 - (B) Keep all information on one page
 - (C) Keep a consistent look and feel
 - (D) Keep contact details hidden
- 4 The protocol developed by Netscape for transmitting private documents is called SSL. This stands for:
- (A) Send Safe Lines
 - (B) Safekeeping Shopping Line
 - (C) Safe and Sound Layers
 - (D) Secure Sockets Layer
- 5 To separate two blocks of text vertically by some white space you use which tag?
- (A)

 - (B) <p>
 - (C) <hr>
 - (D)
- 6 What HTML codes do you use to display the characters '<', '>' and '&'?
- (A) < , > , &
 - (B) <, >, &
 - (C) <han;, >han;, &er;
 - (D) Can't display these characters in HTML
- 7 HTML documents are:
- (A) Perl documents
 - (B) plain-text documents
 - (C) Java documents
 - (D) GIF files

- 8 To specify the client-side imagemap to use for a specific image, include what attribute when specifying the image in the HTML document?
- (A) `imagemap=`
 - (B) `map=`
 - (C) `usemap=`
 - (D) `usermap=`
- 9 A bulleted list uses which tags?
- (A) `...`
 - (B) `<bl>...</bl>`
 - (C) `...`
 - (D) `...`
- 10 To line up tabular data in HTML...
- (A) ... use space characters
 - (B) ... use tab characters
 - (C) ... use the `<align>` tag
 - (D) ... use HTML tables
- 11 To make an image a clickable link:
- (A) surround it with `<a> ... ` tags
 - (B) surround it with `<href> ... </href>` tags
 - (C) include the `'link='` attribute with the image specification
 - (D) include the `'onclick='` attribute with the image specification
- 12 Transmission speed of which of the following file types cannot be significantly increased by using a data compressing modem?
- (A) HTML
 - (B) Compressed GIF89a
 - (C) Compressed JPEG
 - (D) Java
- 13 Compressed GIF89a image files typically show a compression ratio of about...
- (A) 2 to 1
 - (B) 8 to 1
 - (C) 4 to 1
 - (D) 16 to 1
- 14 GIF supports up to how many colours?
- (A) 512
 - (B) 1024
 - (C) 128
 - (D) 256

- 15 LZW stands for:
- (A) Leroy Ziv Welch
 - (B) Lempel Zero Width
 - (C) Lempel Ziv Welch
 - (D) List Zero Wave
- 16 RLE typically produces compression ratios of about:
- (A) 10 to 1
 - (B) 5 to 1
 - (C) 2.5 to 1
 - (D) 7.5 to 1
- 17 RLE stands for
- (A) Run-length encoding
 - (B) Reduced-length encoding
 - (C) Run-length enhancing
 - (D) Reduced length enhancing
- 18 Which statement is correct?
- (A) Normal vision uses reflected light
 - (B) Normal vision uses emitted light
 - (C) Visual Display Units produce reflected light
 - (D) Visual Display Units produce absorbed light
- 19 XBM images are held in what format?
- (A) as Java code
 - (B) as C code
 - (C) as perl code
 - (D) as C++ code
- 20 In general, which statement is true when selecting an image file format to store an image to be displayed on a webpage?
- (A) GIF and JPEG are equally good for all images
 - (B) MPEG is best for computer-generated images and GIF is best for real-world images
 - (C) WWW browsers do not support GIF
 - (D) GIF is best for computer-generated images and JPEG is best for real-world images
- 21 XBM is used to store...
- (A) ...large, black-and-white images
 - (B) ...small, colour images
 - (C) ...small, black-and-white images
 - (D) ...large, colour images

- 22 Which of the following is not a form of data processing?
- (A) Printing
 - (B) Classifying
 - (C) Summarising
 - (D) Selecting
- 23 Information can generally be divided into the following categories:
- (A) Planning Information and Monitoring Information
 - (B) Monitoring Information and Control Information
 - (C) Decision information and Control Information
 - (D) Planning Information and Control Information
- 24 To pipe data from the output of one Unix filter to the input of another Unix filter, use:
- (A) >
 - (B) <
 - (C) |
 - (D) >>
- 25 In terms of activity diagrams, when cooking food in a microwave, the cold food is:
- (A) an output
 - (B) a control input
 - (C) an input
 - (D) an activity
- 26 In rapid prototyping ...
- (A) the rapid analysis phase follows the project plan phase
 - (B) the prototype iteration phase precedes the database creation phase
 - (C) the user approval phase follows the design documentation phase
 - (D) only one prototype is ever produced
- 27 Which of the following is NOT a common lifecycle model?
- (A) COCOMO
 - (B) Waterfall
 - (C) V
 - (D) Spiral
- 28 To change every occurrence of 'red' to 'green' in a string use:
- (A) s/green/red/g
 - (B) s/red/green/g
 - (C) s/red/green/a
 - (D) s/green/red/a

- 29 Which of these matches gives the result boolean 'true'?
- (A) "Gold" =~ /^[a-z]\$/I
 - (B) "Gold" =~ /\$gold/I
 - (C) "Gold" =~ /*fish*/I
 - (D) "Gold" =~ /^go/i
- 30 The first element in a Perl list array called @harry is:
- (A) \$harry(1)
 - (B) \$harry{ start }
 - (C) \$harry[0]
 - (D) \$harry[\$_]
- 31 PHP most often runs:
- (A) Client-side
 - (B) Downstream
 - (C) RDBMS
 - (D) Server-side
- 32 PERL officially stands for
- (A) Practical Extraction and Report Language
 - (B) Pathologically Eclectic Rubbish Lister
 - (C) Practically Easy Reporting Language
 - (D) Possibility Evaluator and Realtime Locator
- 33 In HTML Go to Index
- (A) the # indicates a comment
 - (B) index is the name of a file in the current directory
 - (C) index is the name of an anchor in the same document
 - (D) there is an error since there is no http:// after the = sign
- 34 To create a new directory on UNIX, we use the command
- (A) md
 - (B) mkdir
 - (C) create
 - (D) newdir
- 35 In the command cat S1 S2 S3 >! TEMP
- (A) output will be written to file TEMP, overwriting its current contents
 - (B) output will go to the terminal
 - (C) any errors will go to file TEMP
 - (D) output will be appended to file TEMP

- 36 GIF files can contain up to
- (A) 166 colours
 - (B) 256 colours
 - (C) 64K colours
 - (D) 16 million colours
- 37 The abbreviation WWW stands for
- (A) Widely Worse Web
 - (B) World Wide Web
 - (C) World Wide Weave
 - (D) World Wide Wait
- 38 The RE “[^a-z]cat[^a-z]” does NOT match which line:
- (A) the cat sat on the mat
 - (B) the black cat's mat
 - (C) tomcat and mouse
 - (D) \$cat98 = 123
- 39 Which statement lists character sequences matched by the perl RE /s?ho+t/
- (A) sht, shot, shoot, shooot, ...
 - (B) host, short, shout, hort, ...
 - (C) hot, shot, shoost
 - (D) hot, hoot, shot, shoot, ...
- 40 The command line ‘egrep -i dog *’ lists all lines:
- (A) containing ‘dog’ in all files in the current directory
 - (B) in the files called dog in the root directory
 - (C) starting with ‘dog’ in all files in the home directory
 - (D) containing ‘*’ in the file called ‘dog’ in the current directory
- 41 Which option is used to force case-insensitive matching with egrep?
- (A) -1(number one)
 - (B) -l (lowercase letter L)
 - (C) -c
 - (D) -i
- 42 To remove duplicate white-space characters use the perl RE:
- (A) /\s{2,}/gi
 - (B) s/\s{2,}/i
 - (C) s/\s{2,*}/gi
 - (D) s/\s{2,}/gi

- 43 The perl RE `/c.*t/` matches which sequence of characters in the string 'the cat sat on the mat!' ?
- (A) 'cat'
 - (B) 'cat sat'
 - (C) 'cat sat on the mat'
 - (D) 'cat sat on t'
- 44 The perl RE `/c.*?t/` matches which sequence of characters in the string 'the cat sat on the mat!' ?
- (A) 'cat'
 - (B) 'cat sat on the mat'
 - (C) 'cat sat'
 - (D) 'cat sat on t'
- 45 To match words starting and ending with the same two letters, but in reverse order, use the perl RE:
- (A) `/b(\w)(\w).*\2\1\b/`
 - (B) `/b(\w)(\w)\w*\1\2\b/`
 - (C) `/b(\w)(\w).*\1\2\b/`
 - (D) `/b(\w)(\w)\w*\2\1\b/`
- 46 The perl statement 'if (/fred/) {...}' matches against which variable?
- (A) \$I
 - (B) \$\$
 - (C) \$.
 - (D) \$_
- 47 To match the string 'bill' in the scalar '\$name', use the perl statement:
- (A) `if (/bill/i) {...}`
 - (B) `if ($name = /bill/i) {...}`
 - (C) `if ($name =~ /bill/i) {...}`
 - (D) `if ($name eq /bill/i) {...}`
- 48 Black-box testing is concerned with:
- (A) verifying that inputs generate the correct outputs
 - (B) the accuracy of program documentation
 - (C) the exercising of all program statements
 - (D) the 'look and feel' of the unit under test
- 49 To give file 'tree' these file permissions: User rwx, Group rx and Others rx use:
- (A) `chmod 711 tree`
 - (B) `chmod 744 tree`
 - (C) `ls -lrt tree`
 - (D) `chmod 755 tree`

50 The command 'ls s?t*' will list which of these files?

- (A) sited
- (B) stop
- (C) aster
- (D) suite

End of examination

Sample Paper