

- 1 Which of the following does NOT help to make a good CGI language?
- (A) Ability to manipulate text and other data
 - (B) Ability to interact with the OS and libraries
 - (C) Ability to utilise graphical interfaces
 - (D) Ability to access environment variables
- 2 Which of these methods is used to pass information to a CGI program?
- (A) PUT
 - (B) GET
 - (C) SET
 - (D) READ
- 3 CGI programs are NOT used for:
- (A) Applets
 - (B) Search engines
 - (C) Shopping baskets
 - (D) Visitor counters
- 4 When using CGI.pm the first print statement should be:
- (A) print title
 - (B) print start_html
 - (C) print header
 - (D) print start_form
- 5 Which answer is most accurate? HTTP cookies:
- (A) are stored in biscuit tins
 - (B) are stored client-side
 - (C) are stored server-side
 - (D) cannot be disabled
- 6 Which of the following URLs would load the document xyz.html from the home directory of CEMS student 'jsmith'?
- (A) ftp://www.uwe.ac.uk/~jsmith/xyz.html
 - (B) http://www.cems.uwe.ac.uk/~jsmith/public_html/xyz.html
 - (C) http://www.cems.uwe.ac.uk/jsmith/xyz.html
 - (D) http://www.cems.uwe.ac.uk/~jsmith/xyz.html
- 7 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

- 8 The <TITLE>...</TITLE> tags goes between which tags?
- (A) <BODY> </BODY>
 - (B) <A>
 - (C) <HEAD> </HEAD>
 - (D)
- 9 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) `usemap=`
 - (C) `map=`
 - (D) `usermap=`
- 10 Each data item in an HTML table is surrounded by which tags?
- (A) <td>...</td>
 - (B) <tr>...</tr>
 - (C) <ti>...</ti>
 - (D) <th>...</th>
- 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 Later versions of BMP can support RLE encoding for...
- (A) 2-, 4- and 8 bit colour
 - (B) 4-, 8- and 16 bit-colour
 - (C) 4- and 8-bit colour
 - (D) 4-, 8- and 24-bit colour
- 13 Which image files formats are supported by the widest range of WWW browsers?
- (A) BMP and GIF
 - (B) GIF and JPEG
 - (C) BMP and JPEG
 - (D) GIF and MPEG
- 14 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

- 15 JPEG uses what type of compression algorithm?
- (A) 'lousy'
 - (B) 'leaky'
 - (C) 'lossy'
 - (D) 'lovely'
- 16 Which Unix program allows the editing of GIF image files?
- (A) emacs
 - (B) xv
 - (C) pico
 - (D) jdk
- 17 Transmission speed of which of the following file types cannot be significantly increased by using a data compressing modem?
- (A) Compressed JPEG
 - (B) HTML
 - (C) Compressed GIF89a
 - (D) Java
- 18 XBM is used to store...
- (A) ...large, black-and-white images
 - (B) ...small, colour images
 - (C) ...large, colour images
 - (D) ...small, black-and-white images
- 19 XBM images are held in what format?
- (A) as Java code
 - (B) as perl code
 - (C) as C++ code
 - (D) as C code
- 20 How many colours are available for use in the four colour resolutions supported by BMP images?
- (A) 1,16,256,2²⁴
 - (B) 1,16,256,2¹⁶
 - (C) 2,32,256,2²⁴
 - (D) 16,256,1024,2³²
- 21 Planning information is:
- (A) segregated by function, covers medium time periods and deals with trends and patterns
 - (B) not segregated by function, covers long time periods and deals with detailed data
 - (C) not segregated by function, covers short time periods and with trends and patterns
 - (D) not segregated by function, covers long time periods and deals with trends and patterns

- 22 When drawing an Activity diagram for washing hair, one of the control inputs might be:
- (A) cold water
 - (B) shampoo
 - (C) water temperature
 - (D) dirty hair
- 23 Consider the Unix command `egrep 'aa' < x > y`. The inputs, outputs and control inputs are:
- (A) input: y, output: x, control input: 'aa'
 - (B) input: x, output: aa, control input: y
 - (C) input: y, output: aa, control input: x
 - (D) input: x, output: y, control input: 'aa'
- 24 In terms of activity diagrams, when cooking food in a microwave, the cold food is:
- (A) an input
 - (B) an output
 - (C) a control input
 - (D) an activity
- 25 In rapid prototyping ...
- (A) the prototype iteration phase precedes the database creation phase
 - (B) the rapid analysis phase follows the project plan phase
 - (C) the user approval phase follows the design documentation phase
 - (D) only one prototype is ever produced
- 26 In the 'V' lifecycle model...
- (A) each stage communicates with all the later stages
 - (B) each stage is repeated until the project is complete
 - (C) stage outputs are used to validate later stage outputs
 - (D) stage outputs are not used in later stages
- 27 Normally, a development methodology...
- (A) ... is supported by a particular lifecycle model
 - (B) ... is independent of a lifecycle model
 - (C) ... supports a particular lifecycle model
 - (D) ... is the same as a lifecycle model
- 28 Which of the following is NOT a common lifecycle model?
- (A) Waterfall
 - (B) V
 - (C) COCOMO
 - (D) Spiral

- 29 Which of the following is NOT a traditional development methodology?
- (A) DSDM
 - (B) SSADM
 - (C) Yourdon
 - (D) JSD
- 30 Which of these is not a valid hash assignment?
- (A) `$chill{'thing'}="0 1 2";`
 - (B) `%x{$open} = "knife,6";`
 - (C) `%percent = ("scalar keys",9);`
 - (D) `%perl5 = ();`
- 31 Which of the following is a scalar?
- (A) `@balance[1-3]`
 - (B) `$tooth{'fang'}`
 - (C) `@fish`
 - (D) `%pick{$correct}`
- 32 Perl is NOT which one of these:
- (A) Free
 - (B) Interpreted
 - (C) A "glue" language
 - (D) Strongly typed
- 33 Which of these is a valid PHP script?
- (A) `<php type 'Hello'; >`
 - (B) `<?php type 'Hello' ?>`
 - (C) `<php echo 'Hello'; >`
 - (D) `<?php echo 'Hello'; ?>`
- 34 PHP is least likely to be used to:
- (A) generate images
 - (B) process form data
 - (C) generate dynamic pages
 - (D) connect to databases
- 35 In HTML `Go to Index`
- (A) the # indicates a comment
 - (B) index is the name of a file in the current directory
 - (C) there is an error since there is no http:// after the = sign
 - (D) index is the name of an anchor in the same document

- 36 The full URL to access Julia Dawson's home page is:
- (A) jedawson
 - (B) www.cems.uwe.ac.uk/~jedawson/index.html
 - (C) ~jedawson
 - (D) www.cems.uwe.ac.uk/~jedawson/homepage.html
- 37 URL stands for
- (A) Universal Resource Locator
 - (B) Uniform Resource Locator
 - (C) Uniform Resource Location
 - (D) Universal Resource Location
- 38 To create a new directory on UNIX, we use the command
- (A) md
 - (B) mkdir
 - (C) create
 - (D) newdir
- 39 In the command `cat S1 S2 S3 >! TEMP`
- (A) output will go to the terminal
 - (B) output will be written to file TEMP, overwriting its current contents
 - (C) any errors will go to file TEMP
 - (D) output will be appended to file TEMP
- 40 To write your own HTML, you must
- (A) use an editor on UNIX because PC editors are not compatible with the Internet
 - (B) understand the basic HTML codes
 - (C) have on-line access to the Internet
 - (D) use the special editor provided with Netscape Gold
- 41 Which option is used to force case-insensitive matching with `egrep`?
- (A) -1(number one)
 - (B) -i
 - (C) -l (lowercase letter L)
 - (D) -c
- 42 The perl RE `/s{3,6}/` matches lines containing:
- (A) 3 to 6 white-space characters (not necessarily consecutive)
 - (B) 3 to 6 consecutive white-space characters
 - (C) 3 or 6 consecutive white-space characters
 - (D) 3 or 6 's' characters

- 43 To remove duplicate white-space characters use the perl RE:
- (A) `\s{2,}/ /gi`
 - (B) `s/\s{2,}/ /gi`
 - (C) `s/\s{2,}/ /i`
 - (D) `s/\s{2,*}/ /gi`
- 44 The perl statement 'if (/fred/) {...}' matches against which variable?
- (A) `$I`
 - (B) `$$`
 - (C) `$.`
 - (D) `$_`
- 45 Black-box testing is concerned with:
- (A) the accuracy of program documentation
 - (B) the exercising of all program statements
 - (C) verifying that inputs generate the correct outputs
 - (D) the 'look and feel' of the unit under test
- 46 Suitable test cases to test a module that sorts input lists would include:
- (A) lists designed to cause the module to fail, together with the expected outputs
 - (B) every possible permutation of list, together with the expected outputs
 - (C) lists designed to test for correct operation of the module, together with the expected outputs
 - (D) lists chosen at random, together with the expected outputs
- 47 Assuming 60% of errors in a module have been detected already, doubling the amount of testing will probably:
- (A) slightly reduce the number of errors
 - (B) reduce the number of errors by 50%
 - (C) not reduce the number of errors at all
 - (D) increase the number of errors
- 48 Which of the following is NOT a function of the Operating System?
- (A) Input/Output
 - (B) Desktop Publishing
 - (C) Process Control
 - (D) Memory Management
- 49 The command 'ls s?t*' will list which of these files?
- (A) stop
 - (B) aster
 - (C) sited
 - (D) suite

50 The best command to remove an empty directory called 'pine' is:

- (A) `rmdir pine`
- (B) `rm -fr pine`
- (C) `rm pine -f`
- (D) `mkdir pine`

End of examination

Sample Paper