BCS Level 3 Award in Coding and Logic
QAN 603/0523/X

Sample Paper A

Record your surname / last / family name and initials on the answer sheet.

Sample paper only 20 multiple-choice questions – 1 mark awarded to each question. Mark only one answer to each question. There are no trick questions.

A number of possible answers are given for each question, indicated by either **A. B. C. or D**. Your answers should be clearly indicated on the answer sheet.

Pass mark is 13/20.

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This qualification is regulated by Ofqual (in England).

1   Which of the following Linux and Windows commands would provide a VALID output on each operating system variant?

    a) DIR /o:n /s
    b) LS -ltr
    c) DIR /h:n
    d) D: LS -XS

A   a and b only.
B   b, c and d only.
C   a, b and d only.
D   c and d only.

2   A file from the tmp folder needs to be moved to the documents folder on a Linux machine, how would this be accomplished?

A   mv /tmp/myfile.txt /home/documents/
B   cp myfile.txt /home/documents/
C   mv /tmp/myfile.txt /docs/myfile.txt
D   mv /tmp/myfile.txt /tmp/myfile2.txt

3   Which of the following are VALID command line extensions for Windows based scripts?

    a) .cmd
    b) .vbs
    c) .ps1
    d) .bat

A   a, b and d only.
B   a, b and c only.
C   b, c and d only.
D   All of them.

4   A user is trying to download some files from a website but the download keeps timing out. What is another potential protocol that could be used to download the file?

A   SSH.
B   FTP.
C   HTTP.
D   STP.

5   Which of the following data types would be preferred to contain the number 12.5?

A   Float.
B   Integer.
C   Character.
D   String.

6   Which Linux command can be used to search multiple files for a specific text string or strings?

A   grab
B   search
C   grep
D   find

7   Which native command would be used to compress the contents of a file or a folder on a Linux machine?

A   gzip
B   winzip
C   pkzip
D   7zip

8   An infrastructure technician has been asked to write a Windows based script that
will change multiple file permissions. Which tool will this script use to alter the file
permissions?

A   chmod
B   chperms
C   perms
D   icacls

9   An infrastructure technician needs to find out the IP address of a Windows
workstation. Which command line tool would be used?

A   IFCONFIG
B   IPCONFIG
C   NBTSTAT
D   WINIP

10   An infrastructure technician has been asked to investigate if some workstations
have been infected with a virus. The virus is suspected of gathering and sending
information over the internet. The technician is required to identify which network
connections are open and which process has opened the connection. What is the
BEST command that can display the required information?

A   nbtstat -allports
B   netstat -pp
C   netstat -ab
D   ipconfig /all

11   If a variable in a script has **NOT** been assigned a value, what is default value
assigned to the variable?

A   Null.
B   Negative.
C   Zero.
D   Minus.

12   What does the acronym OWASP stand for?

A   Open Web Association Security Projects.
B   Open Web Application Security Project.
C   Open Web Application Security Protocols.
D   Open Web Application Syntax Protocol.

13   Which of the following commands will list all the processes running on a Linux machine?

A   ps -sr
B   pslist -all
C   ps -aux
D   pslist -sr

14   When considering both Windows and Linux machines, which utilities can be used to schedule and automate tasks?

a) Task Scheduler.
b) Task Master.
c) Cron.
d) Auto Task.

A   a and b only.
B   a and c only.
C   b and d only.
D   c and d only.

15   What will be displayed as a result of the HTML code below?

```
<html>
<body>
     <b>The rain in Spain falls <em>mainly</em> on the plain.</b>
</body>
</html>
```

A   Some of the text is bold except for 'mainly'.
B   All of the text is bold and 'mainly' is underlined.
C   All of text is bold and the word 'mainly' is italicised.
D   Some of the text is italicised except for 'mainly' which is bold.

16 An infrastructure technician types the following command:

ipconfig /all >>c:\temp\networking.txt

A file called "networking.txt" already exists in the c:\temp folder. What is the outcome of this command?

A The c:\temp\networking.txt file will be completely overwritten with the information output by the command.
B The c:\temp\networking.txt file will be appended with the information output by the command.
C The c:\temp\networking.txt file will be deleted.
D The c:\temp\networking.txt file will be displayed on screen.

17 An infrastructure technician has been asked to list all the directories in the root of the X: drive of a Windows server. This list has to be redirected into a text file. Which command SHOULD be used?

A ls x: --d | directories.txt
B ls -d x:\ >>/tmp/directories.txt
C dir /a:d x:\ >c:\temp\directories.txt
D dir /d x: | echo c:\temp\directories.txt

18 A user's Linux computer has recently started crashing at random intervals. An infrastructure technician has been assigned to the problem and suspects that the file system may have become corrupted, as the user has a history of not powering off their machine correctly. Which tool **SHOULD** be used to start troubleshooting the issue?

A chkdsk
B fsck
C fdisk
D diskpart

19   What is the outcome of the following section of a script?

```
if %a% LEQ %b% goto :end
echo SUCCESS!
:end
```

A   The word 'SUCCESS!' is output to the screen if the variable 'a' is greater than or equal to the variable 'b'.
B   The word 'SUCCESS!' is output to the screen if the variable 'b' is greater than or equal to the variable 'a'.
C   The word 'SUCCESS!' is output to the screen if the variable 'a' is greater than the variable 'b'.
D   The word 'SUCCESS!' is output to the screen if the variable 'b' is greater than the variable 'a'.

20   Which of the following is the CORRECT order of steps required when producing a script or program?

A   Design, develop, test, maintain, update.
B   Design, plan, develop, test, maintain.
C   Plan, design, develop, test, update.
D   Plan, design, develop, test, maintain.

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