Please check the examination details below before entering your candidate information

Candidate surname | Other names

Pearson BTEC Level 3 Certificate

Centre Number

Learner Registration Number

Sample assessment material for first assessment March 2019

Time: 35 minutes | Paper Reference **XXXXX/XX**

Networking Architecture

You do not need any other materials.

Total Marks

THE LIVE VERSION OF THIS PAPER WILL CONTAIN A TOTAL OF 30 QUESTIONS

THE SAMPLE ASSESSMENT MATERIALS WILL CONTAIN A TOTAL OF 13 QUESTIONS

Turn over ▶

Pearson

Some questions must be answered with a cross in a box ⊠. If you change your mind about an answer, put a line through the box ⊠ and then mark your new answer with a cross ⊠.

1   Which of these permanent storage devices uses a ROM chip?

(1)

Select **one** option.

☒   **A**   Magnetic hard drive

☒   **B**   Solid state drive

☒   **C**   Firmware

☒   **D**   Memory stick

2   Which of these is a function of the kernel within an operating system?

(1)

Select **one** option.

☒   **A**   Managing networking

☒   **B**   Provide user applications

☒   **C**   Managing processes

☒   **D**   Provide a user interface

3   Which class does the address 130.1.1.1 belong to?

(1)

Select **one** option.

☒   **A**   Class A

☒   **B**   Class B

☒   **C**   Class C

☒   **D**   Class D

4   Convert the decimal value 240 to binary.

(1)

Select **one** option.

☒   **A**   11000000

☒   **B**   11100000

☒   **C**   11110000

☒   **D**   11111000

5 What is the correct subnet mask for a 202.168.10.10/26 address range?

(1)

Select **one** option.

☒ **A** 255.255.255.192

☒ **B** 255.255.225.0

☒ **C** 255.255.10.192

☒ **D** 255.255.0.0

6 What is the maximum segment length for 1000BaseT cabling?

(1)

Select **one** option.

☒ **A** 50m

☒ **B** 100m

☒ **C** 200m

☒ **D** 500m

7 What is the purpose of a wireless router?

(1)

Select **one** option.

☒ **A** To reduce the risk of file corruption

☒ **B** To increase internet connection speed

☒ **C** To send data packets to correct addresses

☒ **D** To encrypt email communications

8 Which type of cable should an OTDR be used to test?

(1)

Select **one** option.

☒ **A** Cat 5

☒ **B** Fibre optic

☒ **C** Coaxial

☒ **D** Twisted pair

S 6 3 5 4 7 A 0 3 0 7

9 What is the primary function of a server in a network?

(1)

Select **one** option.

- ☒ **A** To send packets
- ☒ **B** To store data
- ☒ **C** To prevent unauthorised access
- ☒ **D** To connect to the internet

10 What is the purpose of Active Directory?

(1)

Select **one** option.

- ☒ **A** To translate domain names to IP addresses
- ☒ **B** To store computer and user account information
- ☒ **C** To provide IP addresses to systems on a network
- ☒ **D** To apply operating system updates on a network

11 An infrastructure technician is required to send confidential information including usernames and passwords to colleagues.

How should they protect this communication?

(1)

Select **one** option.

- ☒ **A** By using a coaxial cable
- ☒ **B** By using a loopback address
- ☒ **C** By using personal email
- ☒ **D** By using encryption

S 6 3 5 4 7 A 0 4 0 7

12 An infrastructure technician is working on a computer that has failed to connect to the internet

How should they check if the problem is with the router?

(1)

Select **one** option.

- ☒ **A** Ping the loopback address
- ☒ **B** Ping the broadcast address
- ☒ **C** Ping the default gateway
- ☒ **D** Ping the local host

13 Which of these describes RAID 5 ?

(1)

Select **one** option.

- ☒ **A** Block level striping with dedicated parity
- ☒ **B** Byte striping with dedicated parity
- ☒ **C** Byte level striping with distributed parity
- ☒ **D** Block striping with distributed parity

TOTAL FOR QUESTION PAPER = 13 MARKS

Networking Architecture marking scheme

Question Number	Answer	Mark
1	C - Firmware	**(1)**

Question Number	Answer	Mark
2	C Managing processes	**(1)**

Question Number	Answer	Mark
3	D Class D	**(1)**

Question Number	Answer	Mark
4	C 11110000	**(1)**

Question Number	Answer	Mark
5	A 255.255.255.192	**(1)**

Question Number	Answer	Mark
6	B 100m	**(1)**

Question Number	Answer	Mark
7	C To send data packets to correct addresses	**(1)**

Question Number	Answer	Mark
8	B Fibre optic	(1)

Question Number	Answer	Mark
9	B To store data	(1)

Question Number	Answer	Mark
10	B To store computer and user account information	(1)

Question Number	Answer	Mark
11	D By using encryption	(1)

Question Number	Answer	Mark
12	C Ping the default gateway	(1)

Question Number	Answer	Mark
13	D Block striping with distributed parity	(1)

S 6 3 5 4 7 A 0 7 0 7