## Q1

| Which of these is NOT a **common** type of record you would keep in your computer maintenance system | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | System ID (/serial number) |  | 0 |
|  | Purpose of maintenance activity |  | 0 |
|  | Software version number / release candidate |  | 100 |
|  | Department / location |  | 0 |
|  | General feedback: | Software information may be stored but is not a common item to be recorded. |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q2

| Which of these is NOT a purpose for keeping maintenance records | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | Record of the work completed for customers |  | 0 |
|  | To improve quality of future maintenance work |  | 0 |
|  | To meet organisational guidelines / policies |  | 100 |
|  | Help with scheduling periodic routine maintenance |  | 0 |
|  | General feedback: | Whilst it is likely you will have some organisational guidelines in place which may or may not include maintenance processes this is not the REASON you would keep the records. |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q3

| A NIC (Network Interface Card) - Also referred to as an Ethernet card is a basic computer component, a NIC will be given a hardware address, which is unique, what is a valid example of this address? | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | 0D:FF:D2:83:2A:BB |  | 0 |
|  | AA:BB:CC:DD:EE:FF |  | 0 |
|  | 6D:E4:G1:44:6A:A8 |  | 100 |
|  | 12:34:56:78:9A:BC |  | 0 |
|  | General feedback: | MAC Address is a 12-digit hexadecimal number (6-Byte binary number), which is mostly represented by Colon-Hexadecimal notation. First 6-digits (say 00:40:96) of MAC Address identifies the manufacturer, called as OUI (Organizational Unique Identifier). Hex numbers run from 0 to F, anything above F is not valid (so G in this example is not valid) |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q4

| Read the descriptions below, which is incorrect? | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | File server: a computer and storage device dedicated to storing files. Any user on the network can store files on the server. |  | 0 |
|  | DNS server: A DNS server is a computer server that contains a database of IP addresses and their associated hostnames (the names we type such as www.google.com), and in most cases, serves to resolve, or translate, those common names to IP addresses as requested. |  | 0 |
|  | Web Proxy Server: A proxy server sits between a client program (typically a Web browser) and an external server and is used exclusively for load balancing between client and distributed remote systems |  | 100 |
|  | Mail server: Mail servers move and store mail over corporate networks (via LANs and WANs) and across the Internet. |  | 0 |
|  | General feedback: | Web Proxy Server: A proxy server sits between a client program (typically a Web browser) and an external server (typically another server on the Web) to filter requests, improve performance, and share connections. Whilst a web proxy can perform a degree of load balancing it is not its exclusive/primary purpose. |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q5

| A network is defined as a group of two or more computer systems linked together, which of the following is NOT a valid computer network type? | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | MAN |  | 0 |
|  | CAN |  | 0 |
|  | FAN |  | 100 |
|  | HAN |  | 0 |
|  | General feedback: | local-area networks (LANs): The computers are geographically close together (that is, in the same building).  wide-area networks (WANs): The computers are farther apart and are connected by telephone lines or radio waves.  campus-area networks (CANs): The computers are within a limited geographic area, such as a campus or military base.  metropolitan-area networks (MANs): A data network designed for a town or city.  home-area networks (HANs): A network contained within a user's home that connects a person's digital devices. |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q6

| Which service model would you be using to access your emails through a browser? | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | PaaS |  | 0 |
|  | DaaS |  | 0 |
|  | SaaS |  | 100 |
|  | IaaS |  | 0 |
|  | General feedback: | Please review notes and diagram here <https://vle.tdm.co.uk/mod/page/view.php?id=9098> |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q7

| Which is true of a class B network? | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | Is used for multicasting only |  | 0 |
|  | supports 16 million hosts on each of 126 networks |  | 0 |
|  | supports 65,000 hosts on each of 16,000 networks |  | 100 |
|  | supports 254 hosts on each of 2 million networks |  | 0 |
|  | General feedback: | Class A - supports 16 million hosts on each of 126 networks  Class B - supports 65,000 hosts on each of 16,000 networks  Class C - supports 254 hosts on each of 2 million networks  Class D is used for muticast |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q8

| What are the correct ranges for classes A,B and C networks? | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | Class A 1.0.0.1 to 126.255.255.254  Class B 64.1.0.1 to 127.255.255.254  Class C 128.0.1.1 to 223.255.254.254 |  | 0 |
|  | Class A 1.0.0.1 to 126.255.255.254  Class B 128.1.0.1 to 191.255.255.254  Class C 192.0.1.1 to 223.255.254.254 |  | 100 |
|  | Class A 1.0.0.1 to 99.255.255.254  Class B 100.1.0.1 to 199.255.255.254  Class C 200.0.1.1 to 299.255.254.254 |  | 0 |
|  | Class A 1.0.0.1 to 126.255.255.254  Class B 128.1.0.1 to 223.255.255.254  Class C 224.0.1.1 to 255.255.254.254 |  | 0 |
|  | General feedback: | We usually simplify to the following, but the question is correct, the summart below is simplified to the first “octet”  Class A – 1 to 126  Class B – 128 to 191  Class C – 192 to 223 |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q9

| How might you go about finding out your EXTERNAL IP address on a Windows system? | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | Type ipconfig at the command prompt |  | 0 |
|  | Type ipconfig /all at the command prompt |  | 0 |
|  | Use a site like whatismyipaddress.com in the web browser |  | 100 |
|  | Connect to the DHCP server to look it up |  | 0 |
|  | General feedback: | Be sure to understand the difference between external and internal addresses, <https://vle.tdm.co.uk/mod/page/view.php?id=9104> |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q10

| Consider the following CIDR notations and their correspondong subnet masks, one of these does not match, which is it? | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | 255.255.255.255 / 32 |  | 0 |
|  | 255.255.0.0 / 16 |  | 0 |
|  | 255.0.0.0 / 24 |  | 100 |
|  | General feedback: | Please review the table here, <https://vle.tdm.co.uk/mod/page/view.php?id=9104>  The CIDR is essentially the number of 1’s used to make the address, so 255 is 8 bits of 1, so each 255 octet is worth 8. 255 = 8, 255.255 = 16 and so on. |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q11

| DNS (Domain Name System) usees what port? | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | 23 | Telnet | 0 |
|  | 67 | Incoming DHCP port | 0 |
|  | 53 | DNS | 100 |
|  | 25 | SMTP (mail) | 0 |
|  | General feedback: | DNS is port 53, more ports can be found here <https://vle.tdm.co.uk/mod/page/view.php?id=9115> |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q12

| How many bits long are IPv4 and IPv6 addresses? | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | IPv4 is 64 bit, IPv6 is 128 bit |  | 0 |
|  | IPv4 is 32 bit, IPv6 is 64 bit |  | 0 |
|  | IPv4 is 32 bit, IPv6 is 128 bit |  | 100 |
|  | IPv4 is 32 bit, IPv6 is 256 bit |  | 0 |
|  | General feedback: | IPv4 is 32 bit, IPv6 is 128 bit, <https://vle.tdm.co.uk/mod/page/view.php?id=9105> |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q13

| What type of numbering system does IPv6 use when written in human readable format | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | Binary |  | 0 |
|  | Decimal |  | 0 |
|  | Hexadecimal |  | 100 |
|  | Denary |  | 0 |
|  | General feedback: | IPv4, each octet consists of a decimal number ranging from 0 to 255. These numbers are typically separated by periods. In IPv6, addresses are expressed as a series of eight 4-character hexadecimal numbers, which represent 16 bits each (for a total of 128 bits).  Please review notes here, <https://vle.tdm.co.uk/mod/page/view.php?id=9105> |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q14

| What is 2 to the power of 6? (This is the 7th binary bit) | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | 64 |  | 100 |
|  | 32 |  | 0 |
|  | 128 |  | 0 |
|  | 12 |  | 0 |
|  | General feedback: | 2x2x2x2x2x2 = 64. Please review the notes here, <https://vle.tdm.co.uk/mod/page/view.php?id=9111> |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q15

| Convert 234 into 8 bit binary. | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | 010101010 |  | 0 |
|  | 010111111 |  | 0 |
|  | 011101010 |  | 100 |
|  | 111101010 |  | 0 |
|  | General feedback: | Please use the calculator here <http://easyonlineconverter.com/converters/bitwise-calculator.html> |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q16

| Calculate 10110011 AND 11101110, then convert it to decimal. | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | 156 |  | 0 |
|  | 160 |  | 0 |
|  | 162 |  | 100 |
|  | 158 |  | 0 |
|  | General feedback: | 10100010 is the binary, remember AND requires both bits to be on. 10100010 in binary is 162. Please use the calculator here <http://easyonlineconverter.com/converters/bitwise-calculator.html> |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q17

| Calculate 11110000 OR 00001111 and convert to decimal. Hint: You shouldn’t need a calculator for this one (but it’s OK if you do use one) | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | 256 |  | 0 |
|  | 128 |  | 0 |
|  | 255 |  | 100 |
|  | 127 |  | 0 |
|  | General feedback: | OR is either bit, so in this example we end up with 11111111, which we should know is 255 as this is the sum of all the 8 bits. Please use the calculator here <http://easyonlineconverter.com/converters/bitwise-calculator.html> |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q18

| Calculate NOT 10101010 in binary. | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | 101010 |  | 0 |
|  | 10111011 |  | 0 |
|  | 1010101 |  | 100 |
|  | 11010101 |  | 0 |
|  | General feedback: | NOT simply inverts the bits, note that sometimes the leading bit is omitted, as in this example. When there are less than 8 bits start at the lowest (on the left) and assume missing bits (on the right) are 0.  Please use the calculator here <http://easyonlineconverter.com/converters/bitwise-calculator.html> |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q19

| Identify the network part of this address: 192.168.100.50 / 16 | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | 168.100.50 |  | 0 |
|  | 192.168.100 |  | 0 |
|  | 192.168 | 100.50 would have been the host part. | 100 |
|  | 100.50 |  | 0 |
|  | General feedback: | Remember the host part is on the right and the network part is on the left, the CIDR (or subnet mask) tells you how many bits to apply to each, so in a /16 half is the host the other is the network part. In a /8 the first octet is the network part and the remaining /24 are the host parts. Refer to slides / presentation. |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q20

| Identify the host part of this address: 172.16.0.30 / 8 | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | 172.16 |  | 0 |
|  | 172.16.0 |  | 0 |
|  | 16.0.30 | 172 would be the network part | 100 |
|  | 0.30 |  | 0 |
|  | General feedback: | Remember the host part is on the right and the network part is on the left, the CIDR (or subnet mask) tells you how many bits to apply to each, so in a /16 half is the host the other is the network part. In a /8 the first octet is the network part and the remaining /24 are the host parts. Refer to slides / presentation. |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q21

| Which of the following statements are true? (select **two** only) | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 2 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 66.6 |
| 1. # | Answers | Feedback | Grade |
|  | Data requires the most bandwidth |  | 0 |
|  | Voice requires the least bandwidth |  | 0 |
|  | Data requires the least bandwidth |  | 50 |
|  | Video requires the least bandwidth |  | 0 |
|  | Video requires the most bandwidth |  | 50 |
|  | Voice requires the most bandwidth |  | 0 |
|  | General feedback: | The order is (from lowest to highest), Data, Voice, Video |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q22

| When playing a MMORPG (Massively multiplayer online role-playing game) you notice that your latency increases when you are in populated areas (such as a main city) but settles down (reduces to lower latency) when outside of these zones, what is this variation in server response time an example of? | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | Lag |  | 0 |
|  | FPS Decrease |  | 0 |
|  | Jitter |  | 100 |
|  | Lost packets |  | 0 |
|  | General feedback: | Whilst you may experience a FPS loss in this example (due to the additional processing requirements), which may also contribute to a higher ping, the actual term for the variance in ping from one moment to the next is called Jitter. Lag is simply the time taken for the data to be received. |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q23

| What type of address would you typically assign to a server? | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | APIPA |  | 0 |
|  | DHCP |  | 0 |
|  | Static |  | 100 |
|  | Dynamic |  | 0 |
|  | General feedback: | A static address will usually be assigned on a server as we would not want these addresses to change.  Review notes here, <https://vle.tdm.co.uk/mod/page/view.php?id=9113> |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q24

| When might you perform a reverse DNS lookup? | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | To convert a domain name, such as google.com to an IP address |  | 0 |
|  | To find out whether a site was online or not |  | 0 |
|  | In order to find the hostname of a machine when you only know its IP address |  | 100 |
|  | In order to check your public IP address |  | 0 |
|  | General feedback: | Forward DNS lookup is using an Internet domain name to find an IP address. Reverse DNS lookup is using an Internet IP address to find a domain name. ... An Internet facility that lets you do either forward or reverse DNS lookup yourself is called nslookup. |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q25

| Why might you create a VLAN? | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | To increase the number of network collisions |  | 0 |
|  | To reduce the number of broadcast domain |  | 0 |
|  | To create additional broadcast domain |  | 100 |
|  | In order to avoid using too many switches |  | 0 |
|  | General feedback: | VLANs allow network traffic to seperated in to different broadcast domains, this reduces collisions, which is a good thing. The act of segmenting the network has many benefits, as we add more segments, or VLANs we are creating MORE broadcast domains which REDUCES the number of collisions.  Review notes here, <https://vle.tdm.co.uk/mod/page/view.php?id=9116> |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q26

| What devices would you TYPICALLY use to create a VLAN? | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | Routers |  | 0 |
|  | Hubs |  | 0 |
|  | Switches |  | 100 |
|  | Servers |  | 0 |
|  | General feedback: | VLANs are essentially logical groups of computers, VLAN operates by using the physical addresses of devices (MAC address), and uses ports (switches are designed to communicate to physical addresses) to send information. Switches are needed rather than routers as routers talk the language of TCP/IP (IP addresses and subnetting). It’s important to remember that CIDR/subnetting is a layer 3 (router) technology and VLANs are layer 2 (switch) technologies. Don’t worry too much about the OSI layers for this exam but it useful to help understand the differences.  Additional reading here, <http://www.fiber-optic-transceiver-module.com/vlan-vs-subnet.html> |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q27

| Where on a Linux system would the error logs be found? | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | /etc/log/messages |  | 0 |
|  | /var/log/error |  | 0 |
|  | /var/log/messages |  | 100 |
|  | /var/log/messages.log |  | 0 |
|  | General feedback: | /var/log is the main location linux uses to store all types of log files, these may be about mail/webservices/system etc. The main log file is called “messages”, this is default on most linux systems. Linux does not require extensions (although some log files may have one), the messages log file has no extension. |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q28

| Check Disk (chkdsk) is a command run utility that is used on DOS and Microsoft Windows-based systems to check the file system, Linux has a similar command, what is it? | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | chkdsk |  | 0 |
|  | Fsck |  | 0 |
|  | fdisk |  | 100 |
|  | gparted |  | 0 |
|  | General feedback: | The system utility fsck (file system consistency check) is a tool for checking the consistency of a file system in Unix and Unix-like operating systems, such as Linux, macOS, and FreeBSD. A similar command, CHKDSK, exists in Microsoft Windows and (its ancestor) MS-DOS.  The other options listed are valid Linux commands and do relate to file systems, most specifically with the creation and management of partitions. Gparted can be used on both Windows and Linux. |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q29

| What is the maximum individual file size on a FAT32 partition | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | 32GB |  | 0 |
|  | 2GB |  | 0 |
|  | 4GB |  | 100 |
|  | 8GB |  | 0 |
|  | General feedback: | Individual files on a FAT32 drive can't be over 4 GB in size—that's the maximum. A FAT32 partition must also be less than 8 TB, which admittedly is less of a limitation unless you're using super-high-capacity drive |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q30

| Which of the following matches this definition “New product functionality that is first distributed outside the context of a product release and that is typically included in the next full product release.” | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | Security Update |  | 0 |
|  | Service Pack |  | 0 |
|  | Feature Pack |  | 100 |
|  | Update |  | 0 |
|  | General feedback: | Review notes here, <https://vle.tdm.co.uk/mod/page/view.php?id=9093> |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q31

| A Windows service is a computer program that operates in the background. It is similar in concept to what in Linux? | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | shell script |  | 0 |
|  | service |  | 0 |
|  | daemon |  | 100 |
|  | process |  | 0 |
|  | General feedback: | Overall Feedback |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q32

| What is the correct typical status sequences of maintenance tasks | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | open, fixed, escalation, pending, closed |  | 0 |
|  | open, pending, escalation, fixed, closed |  | 0 |
|  | open, pending, fixed, escalation, closed |  | 100 |
|  | pending, fixed, escalation, open/closed |  | 0 |
|  | General feedback: | * open - initial recording of task ( customer details, description of task, time, business impact, system(s) impacted) * pending - waiting further input or information needed to progress * fixed - awaiting confirmation an issue is resolved * escalation - send the task to a more technically specialised team or more senior member of staff * closed - confirmed complete with documented diagnosis and fix |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q33

| Consider the following tasks, which would you do first? | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | One user unable to login |  | 0 |
|  | Company director is unable to print |  | 0 |
|  | Projector and video feed not working just before an important sales meeting |  | 100 |
|  | New software to be installed on multiple systems |  | 0 |
|  | General feedback: | Whilst all these jobs are important you must prioritize tasks according to business impact and number of users affected, one user is less important (regardless of who they are) than multiple users, you must also consider the impact the problem could have on an important sales meeting. This problem is “live” and must be resolved asap. Software updates would likely not prevent users accessing their system. Review the notes here, <https://vle.tdm.co.uk/mod/page/view.php?id=9090> |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q34

| What is a commitment between a service provider and a client | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | Computer use policy |  | 0 |
|  | A Business Statement |  | 0 |
|  | A Service-level agreement |  | 100 |
|  | Terms and conditions |  | 0 |
|  | General feedback: | A service-level agreement (SLA) is a commitment between a service provider and a client. Particular aspects of the service – quality, availability, responsibilities – are agreed between the service provider and the service user. <https://vle.tdm.co.uk/mod/page/view.php?id=9089> |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q35

| What is true when considering personal and permiter firewalls? | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | A personal firewall will protect the permiter of the network against any external threats |  | 0 |
|  | A permeter firewall is usually less complex and less expensive than a personal firewall |  | 0 |
|  | A perimeter firewall is the main defense in the perimeter of a private network |  | 100 |
|  | A personal firewall will usually be a dedicated device on the network. |  | 0 |
|  | General feedback: | Overall Feedback |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |

## Q36

| You need to securely connect to the console of a firewall in the company in order to add some rules, this firewall does not have a web/graphical interface, which remote support protocol or service would be best suited? | | | MC |
| --- | --- | --- | --- |
| Default mark: | | | 1 |
| Shuffle the choices? | | | Yes |
| Number the choices? | | | a |
| Penalty for each incorrect try: | | | 33.3 |
| 1. # | Answers | Feedback | Grade |
|  | RDP |  | 0 |
|  | Telnet | Whilst telnet may work, we were asked to securely connect, telnet is not secure (data is not encrypted) | 0 |
|  | SSH |  | 100 |
|  | VNC |  | 0 |
|  | General feedback: | * RDP stands for Remote Desktop Protocol. It is a proprietary protocol built by Microsoft to let users graphically control a remote computer. * VNC stands for Virtual Network Computing. It’s an open platform independent graphical desktop sharing system designed to remotely control another computer. * SSH, also known as Secure Socket Shell, is a network protocol that provides administrators with a secure way to access a remote computer. SSH also refers to the suite of utilities that implement the protocol. Most Linux computers will use SSH, there are also many devices such as firewalls and switches that can be accessed using SSH. * Telnet is also worth a mention here as it can also be used to connect to devices, however telnet is not a secure connection and so it's use must be carefully considered. |  |
|  | For any correct response: | Your answer is correct. |  |
|  | For any incorrect response: | Your answer is incorrect. |  |
|  | Hint 1: |  |  |
|  | Show the number of correct responses (Hint 1): | No |  |
|  | Clear incorrect responses (Hint 1): | No |  |
|  | Tags: |  |  |
| *Allows the selection of a single or multiple responses from a pre-defined list. (MC/MA)* | | |  |