

7(a)	A
7(b)(i)	An IP address that has numerical values separated by dots that follows the format with a max value of 255 in any xxx xxx.xxx.xxx.xxx Example: 10.245.3.99
7(b)(ii)	Any two from: • 128-bit // 16 bytes • Hexadecimal • Separated by colons • Characters in groups of 4 • Has 8 groups of characters • Double colons can be used for sets of (consecutive) zeros (only once)

1(a)	– A
1(b)	Any one from: – Spyware // Keylogger – Adware – Trojan horse
1(c)	– Anti-malware
12(a)	Any two from: – <u>Only</u> exists electronically – Can be a decentralised system – Can be a centralised system – Usually encrypted
12(b)	– Blockchain

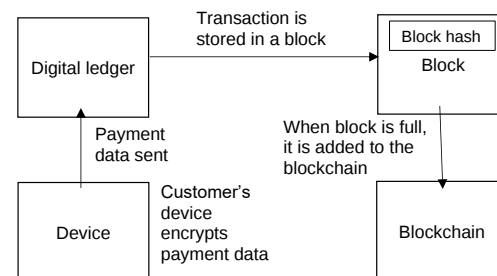
8

One mark for each correct part.

The diagram shows:

- Digital **ledger** is used
- Device encrypting data
- Device sending data to digital **ledger**
- Payment being recorded on digital **ledger**
- ... including details such as digital signature/time/date stamp
- Transaction is stored in a block ...
- ... in multiples
- Each block has block hash/unique identifier
- When block is executed or full
- ... it is applied to every device that has the blockchain // Block is added to blockchain (on each device)

For example:



5

One mark for each term in correct place:

- physically
- blockchains
- time-stamp
- traced

A digital currency does not exist **physically**, it can only be accessed electronically.

Some digital currencies have digital ledgers called a **blockchains**. These are decentralised databases where each transaction is stored as a new set of data with a **time-stamp** and is linked to the previous set of data. This means that transactions cannot be altered, only new transactions added, which allows the location of the data to be **traced**.

6

The diagram includes (any **four** from):

- Traffic passing both ways through the firewall
- An indication that criteria is set for the firewall
- Traffic is compared to criteria
- Traffic being rejected if it does/does not meet criteria
- Traffic being accepted if it does/does not meet criteria

e.g.

