

5. The Internet and Its Uses

5.2 Digital currency

Marking scheme

Q1)

| Question | Answer | Marks |
|----------|--|----------|
| (a) | Any two from: – <u>Only</u> exists electronically – Can be a decentralised system – Can be a centralised system – Usually encrypted | 2 |
| (b) | – Blockchain | 1 |

Q2)

| Question | Answer | Marks |
|----------|---|----------|
| | <p>One mark for each correct part.</p> <p>The diagram shows:</p> <ul style="list-style-type: none"> • 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) <p>For example:</p> <pre> graph TD Device[Device] -- "Payment data sent" --> Ledger[Digital ledger] Ledger -- "Transaction is stored in a block" --> Block["Block hash Block"] Block -- "When block is full, it is added to the blockchain" --> Blockchain[Blockchain] </pre> | 4 |