6 A research company needs to control which personnel are allowed access to secure areas. The company has issued each member of staff with a magnetic stripe card.

a Describe how the magnetic stripe card can be used to limit access to the secure areas.

b Describe additional features which can be added to the card to improve security even further.

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LIVEWORKSHEETS

7 Asif logs into his bank's website using his debit card number (1234 5678 9012 3456). The logon page at this stage is as shown below.

Physical and electronic tokens are used to authenticate the user.

a Describe what is meant by a physical token.

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b Explain how the physical token can be used to generate the one-time password (OTP) which Asif needs to complete the login to his bank.

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LIVEWORKSHEETS

c Explain the difference between a disconnected physical token and a connected physical token.

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d Describe what is meant by an electronic token.

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8 a Explain the term authentication.

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b Zero login is one form of authentication.

i Explain what is meant by zero login.

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ii Give **two** disadvantages of zero login.

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2 .....

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LIVEWORKSHEETS

c Some smartphones use biometrics as a security feature to unlock the device.

Name **two** types of biometric check used by smartphones.

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2 .....

9 Eight statements are shown in the table below.

Indicate whether each statement is true or false by putting a tick (✓) in the correct box.

Statement	True (✓)	False (✓)
A network interface card has a MAC address hard-wired at the manufacturing stage		
Hubs only send data packets to a specific device on the local network		
A bridge is used to connect a local area network (LAN) to any external network		
Routers use IP addresses to direct data packets to the correct network		
Bluetooth uses spread-spectrum frequency hopping to allow device pairing		
Cloud computing does not require access to the internet to enable files to be downloaded or uploaded		
Wide area networks (WANs) only work over a very limited distance geographically		
Zero login depends on biometrics and behavioural patterns		

10 a One type of LAN is a wireless LAN (WLAN).

Compare LANs with WLANs.

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LIVEWORKSHEETS