MODULE E NETWORKS · E1

LANs and WANs

Original practice questions · 21 marks · ~25 minutes · OCR J277 spec 1.3.1

Name _____ Date _____

Instructions. Answer all questions in the spaces provided. The marks for each part are shown in brackets [ ]. The total for this worksheet is **21 marks**.

1

Total: 2 marks

(a) State what the letters **LAN** stand for. **[1]**

(b) State what the letters **WAN** stand for. **[1]**

2

Total: 4 marks

(a) Tick (✓) **one** box in each row to show whether each network is a LAN or a WAN. **[4]**

Network	LAN	WAN
A hospital has 4,000 computers in its buildings on one site, all connected by cables the hospital owns		
A chain of bakeries links the tills in its shops in eight different towns, using lines rented from a telecoms company		
A couple connect their two laptops and a printer to their own router at home		
A shipping firm connects the computers on its ships at sea to its head office using satellite links		

3 **Total: 4 marks**

(a) Give **two** characteristics of a LAN. **[2]**

1

2

(b) Give **two** characteristics of a WAN. **[2]**

1

2

4 **Total: 4 marks**

(a) Tick (✓) **one** box in each row to show whether each statement is true or false. **[4]**

Statement	True	False
Whether a network is a LAN or a WAN is decided by how many computers it connects		
A WAN can use satellite links to connect computers		
The internet is an example of a WAN		
All the hardware in a WAN is usually owned by the organisation that uses it		

5 **Total: 5 marks**

A veterinary practice has one surgery with 30 computers connected in a LAN. It is opening a second surgery in a city 200 km away. Both surgeries need to share the same records of animals and appointments.

(a) Explain why the network that joins the two surgeries will be a WAN. **[2]**

(b) The practice manager says: "If the new surgery has 300 computers, its network will have to be a WAN."
Explain why the manager is **not** correct. **[2]**

(c) State the name of the largest WAN. **[1]**

6 **Total: 2 marks**

(a) Explain **one** reason why a LAN is usually cheaper for an organisation to run than a WAN. **[2]**

Total for this worksheet: 21 marks