

Applied Information Technology

Unit 3B

Networks

Name: _____

Multiple Choice Questions – Circle the letter of the correct answer (1 mark each)

1. The process that allows users connected to a network to transfer money from one bank account to another is called
 - a. network financial transfer
 - b. electronic funds transfer
 - c. network money relocation
 - d. user money transfer

2. The design of computers, devices and media in a network is known as
 - a. network hardware
 - b. network layout
 - c. network architecture
 - d. network setup

3. The host computer that controls access to the hardware, software and other resources on the network as well as providing a centralized storage area for programs, and data is called a
 - a. server
 - b. master
 - c. hub
 - d. controller

4. A simple, inexpensive network that typically connects fewer than ten computers is a
 - a. startup network
 - b. peer-to-peer network
 - c. client-server network
 - d. local area network

5. What is a Bus Network?
 - a. a single central cable to which all computers and other devices connect.
 - b. where all of the computers and devices connect to a central device.
 - c. a cable forms a closed loop with all computers and devices arranged along the loop.
 - d. a network where data travels in large groups guided by a driver.

6. When organisations apply Internet and Web technologies to their internal networks it is called a

- a. intarnet
- b. intoonet
- c. intronet
- d. intranet

7. Computers and devices that have the appropriate wireless capability can communicate using

- a. micro-waves
- b. radio waves
- c. air waves
- d. infer-red waves

Short Answer Questions (2 marks each)

8. What is a Router and why is it important in a small business or home network?

9. What is a network interface card (NIC)

10. Why is ADSL (asymmetric digital subscriber line) ideal for Internet access?

11. Give **two** examples of why a company would need to network their computers?

12. The world's largest network is the Internet. List **four** ways that people use the Internet to communicate efficiently?

13. Briefly explain the difference between a **LAN** and a **WLAN**?

14. What is the difference between a **client** computer and a **server** computer on a network?

15. Explain the term Network Topologies giving three examples?

16. What does the Ethernet standard define guidelines for, and why is it so popular?

17. How does the network standard, Transmission Control Protocol/Internet Protocol (TCP/IP) define how data is moved over a network?

18. Explain how data is transferred between two Bluetooth enabled devices?

19. Many large cities have installed RFID Toll Collection booths to charge motorists entering the CBD. How does Electronic RFID Toll Collection work?

20. What is Wireless Application Protocol (WAP) and what will a smart phone need to be able to use it?

Extended Answer Question (10 marks)

21. Firefly Fine Dining is an international restaurant chain. It has restaurants situated on almost every continent and in smaller nations located in the Caribbean Sea and the Pacific and Indian Oceans. Each restaurant has been positioned in popular tourist areas. The management of Firefly wants all transactions conducted at the restaurants sent to its central database at the close of each restaurant's business day. In addition, the management wants each restaurant to send all of its data files (which record sales, customer information, employee timesheets, payments made and supplies ordered) to its head office in Perth to be stored on the company's server.

(a) All files from each location must be sent across the Internet. Describe what the company could do to reduce the cost and the time taken to transmit each file. (4 marks)

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slight shadow on the right side, suggesting it's part of a bound notebook.

(b) Some of the information that is sent from various locations around the world to the head office is confidential. Explain **three** methods that would ensure the security and integrity of the data on a PC before it was sent. (6 marks)

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slight shadow on the right side, suggesting it's resting on a surface.