

**9628-03 Level 4 Diploma in Network Principles (for the Level 4
Network Engineer Apprenticeship)**
9628-403 Network Principles

Sample question paper

Duration: 45 minutes

Candidate's name:

Candidate's enrolment number:

Centre name:

Centre number:

Date:

- 1 Which one of the following is the **key** feature of SAN?
 - a. It uses Fibre Channel for data transfer.
 - b. It is a low-cost alternative to NAS.
 - c. It uses wireless connectivity for data transfer.
 - d. It is compatible with SOHO.
- 2 Which one of the following cloud-based services **only** provides access to the physical resources required to host operating systems and applications?
 - a. IaaS
 - b. NaaS
 - c. PaaS
 - d. SaaS
- 3 Which one of the following methods is used to transfer **large** files between websites?
 - a. TFTP
 - b. NTFS
 - c. NFS
 - d. FTP
- 4 Which one of the following file systems enables storage and retrieval of data from multiple disks across a shared network using both Linux and Windows-based OS?
 - a. NFS
 - b. DOS
 - c. NTFS
 - d. APFS
- 5 Which one of the following protocols facilitates communication between email servers?
 - a. IMAP
 - b. POP
 - c. SMTP
 - d. EGP
- 6 Which one of the following is the **main** reason for using the SSH protocol to connect to a remote terminal?
 - a. It allows guest logins.
 - b. It provides secure access.
 - c. It acts as a gateway suite.
 - d. It provides time-sensitive data.
- 7 Which one of the following allows multiple instances of an OS to be run on a single device?
 - a. HyperThreads.
 - b. Multi processing.
 - c. HyperVisor.
 - d. Multi queuing.
- 8 Which one of the following technologies enables clustering of multiple servers?
 - a. Grid computing.
 - b. Intranet.
 - c. Load balancing.
 - d. Virtualisation.
- 9 Which one of the following allows data processing with the **minimum** delay following a disaster?
 - a. Cold site.
 - b. Warm site.
 - c. Hot site.
 - d. Spare site.
- 10 Which one of the following **best** describes a metropolitan network?
 - a. A network covering an entire city.
 - b. A network connecting different cities.
 - c. A network made up of multiple WANs.
 - d. A logical segmentation of a network.
- 11 What is the difference between an adhoc wireless network and a managed wireless network?
 - a. Managed networks have faster data rates.
 - b. Adhoc networks do not use access points.
 - c. Adhoc networks are only used in emergencies.
 - d. Managed networks use different frequencies.
- 12 Which one of the following is a disadvantage of a Powerline based network?
 - a. It cannot perform at speeds more than 80Mbps.
 - b. It cannot be used to extend a wireless network.
 - c. Each room must have its own access point.
 - d. Data rates are affected by noise in the circuit.

- 13 Which one of the following is the **most** likely cause of drop in download speed when accessing broadband via an ADSL connection?
- Wireless interference.
 - The cable is about to break.
 - The modem has not been set up correctly.
 - Other users are downloading large files.
- 14 Which one of the following technologies allows ad hoc device connections of **up to** 10 metres to transfer data?
- RFC.
 - Bluetooth.
 - WiFi.
 - WiMAX.
- 15 In an Ethernet network, which one of the following devices uses IP addresses to calculate the next hop?
- Firewall.
 - Switch.
 - NIC
 - Router.
- 16 Which one of the following devices filters traffic based on the destination MAC address?
- Router.
 - Switch.
 - Repeater.
 - Hub.
- 17 Which layer in the TCP/IP model carries out the same function as the Data Link layer of the OSI model?
- Internet.
 - Transport.
 - Application.
 - Network Access.
- 18 Which one of the following protocols functions at the transport layer in **both** the OSI and TCP/IP models?
- UDP
 - SMTP
 - OSPF
 - NetBIOS
- 19 At which layer of the OSI model does ICMP operate?
- Application.
 - Transport.
 - Network.
 - Physical.
- 20 Which one of the following devices is used when creating VLANs?
- Layer 2 switch.
 - Bridge.
 - Layer 3 switch.
 - Gateway.
- 21 Which layer does a bridge operate at?
- Data Link.
 - Network.
 - Transport.
 - Session.
- 22 What is the **main** reason for implementing CIDR in an IPv4 addressing scheme?
- To make more port addresses available.
 - To make addressing secure using IPSec.
 - To make more IP addresses available.
 - To translate between physical and logical addresses.
- 23 What is the **main** reason for an organisation to use Supernetting?
- To enable interdomain gateways.
 - To segregate a defined area of a network.
 - To enhance the performance of RIP.
 - To aggregate multiple addresses of the same class.
- 24 For what are IPv4 Class D addresses reserved?
- Unicast.
 - APIPA.
 - Multicast.
 - Experimental use.

25 What is the binary equivalent of the decimal number 80?

- a. 01010101
- b. 10101000
- c. 01010000
- d. 10101110

26 What is the decimal equivalent of the binary number 0101010?

- a. 26
- b. 32
- c. 40
- d. 42

27 What is the decimal equivalent of the hexadecimal value AF?

- a. 175
- b. 114
- c. 65
- d. 25

28 Which one of the following is a reason for allocating a static IP address to a router?

- a. It has lower administrative overheads when configuring the router.
- b. It allows the implementation of OSPF on the router.
- c. It allows secure access to the router terminal.
- d. It provides a default path to the router.

29 Which one of the following is the **main** benefit of implementing dynamic routing?

- a. Decreased routing overheads.
- b. Scalability of networks.
- c. Increased address pool.
- d. Guaranteed delivery of data.

30 Which one of the following routing protocols is used to exchange routing and reachability information between autonomous systems?

- a. BGP
- b. EPG
- c. IGRP
- d. IS-IS

NOW GO BACK AND CHECK YOUR WORK

- **IMPORTANT -**
Are the details at the top of the answer sheet correct?