

# BCS Level 4 Certificate in Network Services

## QAN 603/3256/6

### Specimen Paper A

Record your surname / last / family name and initials on the answer sheet.

**Specimen paper only 20 multiple-choice questions** – 1 mark awarded to each question. Mark only one answer to each question. There are no trick questions.

A number of possible answers are given for each question, indicated by either **A. B. C. or D.** Your answers should be clearly indicated on the answer sheet.

Pass mark is 13/20.

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**This qualification is regulated by Ofqual (in England).**

- 1 If an indoor arena is hosting a music festival and needs to cover to the edge of the arena which has a diameter of 100 m, which of the following wireless standards **SHOULD** be supported by the access point used?
- A IEEE 802.11b.
  - B IEEE 802.11n.
  - C IEEE 802.3.
  - D IEEE 802.15.1.
- 2 Which of the following network services is used to resolve FQDNs to IP addresses?
- A DNS.
  - B FTP.
  - C DHCP.
  - D APIPA.
- 3 A router using dynamic routing determines the best path to a destination address. When will it put this information into its route table?
- A When RIPv1 is the chosen protocol.
  - B If OSPF is activated.
  - C If the default route does not exist.
  - D It always does it.
- 4 A technician working in a Windows environment is required to create a security policy which will prohibit some users from shutting down their computers. Which of the following would be used for this task?
- A Web Proxy Server.
  - B SQL Server.
  - C Central Administration Console.
  - D Active Directory.

- 5** What does a SIP registrar network element register?
- A** A user's telephone number and physical location.
  - B** A user's address of record and their SIP device's IP address.
  - C** A user's profile and associated services, such as voicemail.
  - D** A user's address book functionality with default contacts.
- 6** Which of the following cabling types has a maximum segment length exceeding 250 m?
- A** 100Base-TX.
  - B** 10GBase-SR.
  - C** 10Base2.
  - D** 10GBase-T.
- 7** Which of the following is arranged in the CORRECT Active Directory organisational order (largest to smallest)?
- A** Forest, Tree, Network Objects, Domain.
  - B** Network Objects, Tree, Forest, Domain.
  - C** Forest, Tree, Domain, Network Objects.
  - D** Network Objects, Domain, Forest, Tree.
- 8** When creating a profile within Active Directory, what is meant by a Group Policy Object?
- A** A set of folder rules that determine where email messages are saved.
  - B** Allows the user greater security for network operations to the Internet.
  - C** Determines the hierarchy of a domain so that it can fit the operational structure of an organisation.
  - D** A collection of settings which define how a system will look and behave for a defined group of users.

- 9 Which netmask is used to subnet 192.168.0.0/24 into four equal sized sub-networks?
- A 255.255.128.0
  - B 255.255.192.0
  - C 255.255.255.128
  - D 255.255.255.192
- 10 What media is used to access wireless devices from a wireless access point?
- A Infrared.
  - B Radio waves.
  - C Visible light.
  - D Copper cable.
- 11 If a packet capture tool is being used to troubleshoot SIP traffic problems and the results need to be saved for further diagnostics later, what common format would the packet trace **MOST LIKELY** be saved in?
- A PCAP.
  - B E01.
  - C CSV.
  - D SQL.
- 12 What type of cloud service would a hosted email service be?
- A IaaS.
  - B PaaS.
  - C SaaS.
  - D XaaS.
- 13 Which of the following protocols provides secure remote connectivity?
- A Telnet.
  - B SSH.
  - C REXEC.
  - D RSH.

- 14 Apart from any logarithmic function, what is the **MAIN** relationship / calculation for a network signal SNR?
- A Average signal power/average noise power.
  - B Average signal power/average distortion.
  - C Average noise Power/attenuation.
  - D Average attenuation/average distortion.
- 15 What is the maximum number of hosts allowed on subnet 172.30.100.0/22?
- A 258.
  - B 510.
  - C 522.
  - D 1022.
- 16 What factor is a **KEY** characteristic of both video and voice communications?
- A Both have a high bandwidth requirement.
  - B They will continue even if packets are lost.
  - C They must be restarted if data is lost.
  - D Both have a low bandwidth requirement.
- 17 Which of the following is a **VALID** record type on a DNS server?
- A SVR.
  - B NX.
  - C CNAME.
  - D PRT.
- 18 What is the maximum decimal number that can be represented in 8 binary bits?
- A 248.
  - B 254.
  - C 255.
  - D 256.

- 19** In order to prevent eavesdropping of a SIP voice call, which protocols can provide confidentiality for the connection between the SIP client and server?
- a) TCP.
  - b) RTP.
  - c) UDP.
  - d) SRTP.
  - e) TLS.
- A** a and b only.  
**B** c and d only.  
**C** d and e only.  
**D** b and e only.
- 20** The OSI 7 layer model has seven protocol layers. Which layer falls between the Transport and the Data Link layer?
- A** Physical.
  - B** Session.
  - C** Network.
  - D** Application.

**-End of Paper-**