



BCS Level 4 Award in Network and Digital Communications Theory QAN 603/0703/1

Specimen Paper

**Version 5.0
July 2020**

Change History

Any changes made to the specimen paper shall be clearly documented with a change history log. This shall include the latest version number, date of the amendment and changes made. The purpose is to identify quickly what changes have been made.

Version Number	Changes Made
Version 1.0 September 2017	Document created.
Version 2.0 February 2018	Updates to questions.
Version 3.0 September 2018	Edit to title and formatting changes.
Version 4.0 July 2019	Major changes to questions to match Syllabus question weightings.
Version 4.1 August 2019	Minor tweak to question 4
Version 5.0 July 2020	Major changes to questions to match updated syllabus (V3.0). Paper size reduced to 20 questions. Title page, change history table and related syllabus section added.

Related Syllabus

This specimen paper and answer key are related to the following syllabus:

**BCS Level 4 Award in Network and Digital Communications Theory Syllabus V3.0
March 2020**



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Specimen Paper

Record your surname/ last/ family name and initials on the Answer Sheet.

Specimen paper only. 10 multiple-choice questions – 1 mark awarded to each question. Mark only one answer for 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.

This is a specimen examination paper only.

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This qualification is regulated by Ofqual (in England).

- 1 Media Access Control (MAC) is part of which OSI layer?
- A Network.
 - B Physical.
 - C Data Link.
 - D Transport.
- 2 Which of the following standards covers Ethernet protocols?
- A 802.3
 - B 802.11
 - C 802.1
 - D 802.6
- 3 When securely transferring data over a network, which of the following protocols would be **MOST** appropriate?
- A SMTP.
 - B SNMP.
 - C FTP.
 - D HTTPS.
- 4 When an interconnection device receives a frame of 62 octets what is likely to happen next?
- A The device drops the frame.
 - B The device forwards the frame.
 - C The device returns the frame to sender.
 - D The device adds 8 octets and re-transmits it.
- 5 Which of the following error control techniques **COULD** give a false-positive result?
- A Checksum.
 - B CRC.
 - C Parity.
 - D Redundancy.

- 6 In which of the following scenarios would it be preferable to use static routing?
- A Where redundancy is a priority.
 - B Routing to a stub network.
 - C In a large constantly changing network.
 - D Routing across a WAN.
- 7 Which of the following is a disadvantage of using the OSPF protocol?
- A Hierarchical protocol.
 - B Processor intensive.
 - C Uses multicasting.
 - D Single copy of routing information.
- 8 Why does contention in a network cause a slow response for users?
- A Networks are limited to a specific number of connections.
 - B Causes data packets to be dropped.
 - C Causes data to be corrupted.
 - D Data has to be retransmitted.
- 9 Which of the following describes the effect of contention on network performance?
- A Increases speed of connections.
 - B Increases data integrity.
 - C Causes data loss.
 - D Latency is increased.
- 10 By limiting the use of file-sharing applications and prioritising VoIP traffic, what are a network team implementing?
- A Route-based traffic shaping.
 - B Application-based traffic shaping.
 - C Presentation-based traffic shaping.
 - D Frame-based traffic shaping.

-End of Paper-