



BCS Level 3 IT Solutions Technician EPA Knowledge Unit Core IT Knowledge

Specimen Paper

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 knowledge unit is regulated by the following United Kingdom Regulator – NSAR.

1 What is an advantage of using a computer network?

- A** Unauthorised access.
- B** Centralised management.
- C** Viruses are constrained to individual workstations.
- D** Once the network is set up no further cost implications are necessary.

2 In the OSI model, which layer is responsible for handling syntax differences in data representation?

An example would be conversion of an EBCDIC-coded text file to an ASCII file.

- A** Session.
- B** Application.
- C** Datalink.
- D** Presentation.

3 Which TCP/IP layer is used for routing data to the correct destination?

- A** Internet.
- B** Transport.
- C** Network Access.
- D** Application.

4 An MX record is linked to which service?

- A** Printing.
- B** Website hosting.
- C** Email.
- D** File sharing.

5 What service is designed to assign IP addresses to nodes on a TCP/IP network during initialisation?

- A** PING.
- B** Telnet.
- C** Netstat.
- D** DHCP.

- 6 Which of the following is the **BEST** description of a LAN?
- A An encrypted internet connection.
 - B A network over a small area.
 - C A virtual private network.
 - D An unencrypted internet connection.
- 7 Which of the following are routing protocols?
- A OSPF and RIP.
 - B TCP and UDP.
 - C RIP and UDP.
 - D OSPF and TCP.
- 8 A user's computer has an IP address of 10.17.24.47 and a subnet mask of 255.255.0.0. Which of the following relates to the network portion of the address?
- A 24.47
 - B 17.24.47
 - C 10.17
 - D 10.17.24
- 9 A helpdesk technician is using Windows Remote Desktop to remotely troubleshoot a user's Windows PC. Which port needs to be opened on the network to allow this connection?
- A 8080.
 - B 88.
 - C 80.
 - D 3389.
- 10 Which statement **BEST** describes the function of a router?
- A Connects devices together on a computer network.
 - B Forwards data packets between computer networks.
 - C Connects multiple Ethernet devices together.
 - D Monitors and controls incoming and outgoing network traffic for security.

- 11 What IT solution component is designed to provide a specific task for end users?
- A Application.
 - B Web server.
 - C Print server.
 - D Operating system.
- 12 Which part of a computer can be used to reliably store information once the computer is switched off?
- A Memory.
 - B CPU.
 - C Hard disk drive.
 - D Floppy disk drive.
- 13 What is the **MAIN** purpose of an operating system?
- A To lower the risk of virus threats.
 - B To defragment data storage.
 - C To provide a command line interface.
 - D To manage a computer's resources.
- 14 Which of the following is TRUE when using mobile platforms in delivering IT solutions?
- A Mobile devices are not widely used.
 - B More security measures are needed in case the mobile device is stolen.
 - C The solution can only be accessed when in a fixed location.
 - D Functionality of the solution will be very limited.
- 15 What is a distributed version-control system for tracking changes in source code during software development?
- A Bug card.
 - B CRM system.
 - C Git.
 - D EPOS.

- 16 What type of cloud service would a hosted email service be?
- A SaaS.
 - B IaaS.
 - C PaaS.
 - D XaaS.
- 17 Which potential application of AI could be a threat to an organisation?
- A Speech recognition on a VoIP switchboard.
 - B Advanced heuristics in an anti-virus application.
 - C AI supported biometric scanner of a server room door.
 - D A computer program that simulates human conversation or chat.
- 18 1000 MB equivalent to which of the following?
- A 1 KB.
 - B 1 TB.
 - C 1 GB.
 - D 10 GB.
- 19 What is the **KEY** difference between a flat file database and a relational database?
- A In relational databases the information is stored in one table only.
 - B In relational databases the information is structured using more than one table.
 - C A flat file database uses information that is retrieved using relationships between tables.
 - D A flat file database uses more than one table to store and retrieve information.
- 20 What common contractual document will include response times to customer requests?
- A Service level agreement.
 - B Non-disclosure agreement.
 - C Acceptable use policy.
 - D Intellectual property.

End of Paper