# BCS Level 4 Certificate in Network Systems and Architecture

## Sample paper

## 20 questions

## 1 Half hour

1 According to BS 7671, what colour(s) sheath SHOULD protective conductors have?

A Grey/Green.

B Green/Yellow.

C Green.

D Cream.

2 Which one of the following connectors is recognised by the standards for optical fibre?

A SC-D connector.

B BNC connector.

C Modular Jack connector.

D RJ-45 Connector.

3 How many pairs in a Cat5e cable are used to provide power in Power over Ethernet?

A 1.

B 2.

C 3.

D All 4 pairs.

4 Sometimes the signal in one twisted pair can interfere with the signal in another twisted pair in the same cable. What is this called?

A Crosstalk.

B Signal Jitter.

C Crossover.

D Transfer.

5 Which of the following can be used to provide a reliable 100Mbps link between two office blocks, over a distance of 6km, where there is a clear line of sight between them?

A 850nm Free Space Optics.

B 23GHz microwave radio link.

C 802.11g wireless LAN.

D Cat 6 cable.

6 The MOST commonly used diagnostic tool in network management used to test connectivity between one end point and another is?

A IPCONFIG.

B ARP.

C DHCP.

D PING.

7 A customer is unable to access websites. You discover that their computer can ping a web IP address but not www.google.com. What will you investigate next?

A The computer's ARP table.

B The physical network cable.

C The wireless SSID.

D The computer's DNS settings.

 8 When carrying out a radio survey, you note that the received signal strength is 30dBm. What power does this equate to?

A 1 watt.

B 1 milliwatt.

C 10 microwatts.

D 1 microwatt.

9 What is the recommended colour of SC-D connectors for singlemode fibre?

A Beige.

B Blue.

C White.

D Black.

 10 What does a red IEC 60309 plug signify?

A A special D-Type connector for a server.

B 110v portable tools.

C 3 phase, 415v equipment.

D A multimode fibre optic connector.

11 When data cabling is installed in conduit, EN 50174-1 recommends that space for pull boxes SHOULD be left every?

A 5m.

B 12m.

C 15m.

D 20m.

12 Which European Standard applies to the raised access floors used in many IT equipment rooms and offices?

A BSEN 7671.

B BSEN 50174.

C BSEN 12825.

D BSEN 25999.

13 If a patch panel is 4 U high, how much space will it take up in the rack?

A 1.75 inches.

B 7 inches.

C 100mm.

D 200mm.

14 According to ASHRAE, what are the Class 1 allowable limits for the temperature of the air supplied to the intake of IT equipment?

A 10 - 35C.

B 15C - 32C.

C 18 - 32C.

D 18 - 27C.

15 Which legislation MUST an electrical installation in a dwelling in England and Wales comply with?

A The Health and Safety at Work Act (1999).

B The Building Regulations - Part P (2005).

C The Electricity at Work Regulations (1989).

D The Building Regulations - Part L (2008).

16 According to the Control of Noise at Work (2005) Regulations, what are the Lower and Upper Average Exposure Action Values?

A 75dB and 80dB.

B 80dB and 85dB.

C 80dB and 90dB.

D 85dB and 90dB.

17 Where would you use an intumescent sealant?

A In the joint of a data cabinet to prevent the ingress of moisture.

B Around a fibre optic splice to provide mechanical strength and prevent moisture ingress.

C To fill the gaps in a cable bundle as it passes through a hole in a wall.

D In a server to improve the connection of the heat sink to the CPU.

18 When you are working in a helpdesk, which of the following is a recommended good idea to keep beside the phone at all times?

A Your lunch, so you can keep answering calls whilst eating, because lunchtime is a busy period.

B A cell phone so that you can take other calls.

C A pen and pad for making notes.

D A tablet to Google information that may be useful in solving the customer's issue.

 19 In project management, what is the name of process which divides project deliverables into smaller more manageable components?

 A Division.

B Decomposition.

C Rolling Wave.

D Organisational Breakdown Structure.

20 You are delivering an information security awareness session for all employees. What will you advise them to do with printed copies of sensitive or confidential personal information which are no longer required?

A Place them in the office recycling bin for recycling.

B Place them in a specially designated out-tray so that the office cleaners can collect them for disposal after hours.

C Ensure the documents are destroyed by shredding or pulping them.

D Take them home and dispose of them there so they cannot be traced back to the company.