

**BCS Level 3 IT Solutions Technician EPA Knowledge Unit Hardware
Answer Key and Rationale**

Question	Answer	Explanation / Rationale	Syllabus Sections
1	B	In solution architecture once the business problem has been established, the solution designed and constraints identified the final step is to implement the solution.	1.1
2	A	None of the other steps can take place until the problem has been established	1.1
3	C	Small-Outline Dual Inline Memory Module (SODIMM) is commonly used for memory in laptops.	2.1
4	D	An RJ45 connector is very distinctive and is used for CAT5 and CAT6 cables. It is generally clear in colour with a plastic clip to lock the connector in place.	3.1
5	D	Cat6 uses RJ45 and is the only one of the cable types mentioned that supports up to 10 GB/s data transfer rates.	3.2
6	A	100BaseFx supports speeds up to 100 MB per second and is a two strand fibre cable.	3.3
7	C	Using a standard computer build means all components will be standard and therefore can be interchangeable between workstations.	4.1
8	B	Near-field communication (NFC) has the shortest connection range.	5.1
9	D	Unsolicited messages sent over Bluetooth is called bluejacking.	5.2
10	A	The tearing down of the tunnel is the last stage of an IPSec VPN, to ensure that the tunnel is not left open unnecessarily and therefore leaving the connection open to hacking attempts.	5.3
11	C	In order to configure the VPN, the server name needs to be known.	8.6
12	B	A storage area network is a local network with multiple storage devices.	6.1
13	D	RAID 1 writes and reads identical data to pairs of drives, this is known as mirroring.	6.2
14	B	A carbon dioxide (CO ₂) fire extinguisher is used on electrical fires and flammable liquid fires.	7.1
15	A	Electrostatic wrist bands are used to prevent static being transferred from the technician to the computer which could damage components.	7.2
16	C	Nslookup finds the IP address associated with a domain.	8.1
17	D	The very first thing a technician should do, if it wasn't part of the OS setup, is change the root password.	8.2

Question	Answer	Explanation / Rationale	Syllabus Sections
18	B	The basic input output system governs initial stages of the startup process.	8.3
19	A	All CPU cores are tested in a stress test.	8.4
20	C	Remote wipe is used to remotely wipe a handset if the device has been confirmed or stolen.	8.5