SECTION A

QUESTION 1: MATCHING COLUMNS

1.1 E √
1.2 G √
1.3 K √
1.4 C √
1.5 J √
1.6 A √
1.7 B √
1.8 M √
1.9 L √
1.10 D √

(10 x 1) [10]

QUESTION 2: MULTIPLE-CHOICE QUESTIONS

2.1 D √
2.2 C √
2.3 C √
2.4 C √
2.5 D √
2.6 D √
2.7 A √
2.8 A √
2.9 B √
2.10 A √

(10 x 1) [10]

TOTAL SECTION A: 20
SECTION B

QUESTION 3

3.1 3.1.1 Desktop √
     2.7 GHz √ (2)

3.1.2 2GB √ (1)

3.1.3 Ubuntu OS √ (1)

3.1.4 • Can be downloaded from the Internet. √
• Source code can be downloaded and edited. √
• No licensing costs. √
• Programs can be redistributed. √ (Any 1) (1)

3.1.5 • No after sales support. √
• Very few textbooks/manuals available. √
• Very little training available. √ (Any 2) (2)

3.1.6 Laptop √ (1)

3.2 3.2.1 Uses less space. √
• Can be used in the event of power failure. √
• Portable/mobile √
• Can be used for Internet connectivity at hotspots. √ (Any 2) (2)

3.2.2 • Might easily be stolen. √
• Can easily be damaged by being dropped as it is a portable device. √
• More expensive to buy. √
• Expensive to repair and upgrade, etc. √ (Any 2) (2)

3.2.3 A dual core processor is one CPU chip with two different cores. √
Each core handles incoming data separately and in this way improves efficiency. √ (2)

3.2.4 It is a device that can read up to 8 different memory cards. √ (1)

3.2.5 The size of the screen in inches, √ measure it diagonally from top left to right bottom. √ (2)

3.3 Bluetooth has a longer range than infrared. √
Bluetooth does not have the limitation of infrared with regards to line of sight. √ (2)

3.4 3.4.1 Yes, √ backward compatibility because all DVD writers can read and write CD’s or DVD’s, but not the other way round. √ (2)
3.4.2 Utilising two recordable dye layers, each capable of storing nearly the 4.7 GB of a single layer disc (doubling the total disc capacity). \(\sqrt{\checkmark}\) (2)

3.4.3 HD Video requires lots of space which a Blu-ray has. \(\sqrt{\checkmark}\) (2)

3.5 3.5.1 Laser printer \(\checkmark\) (1)  
3.5.2 Inkjet printer \(\checkmark\) (1)

3.6 The seller will send a technician to the location of the desktop \(\checkmark\) to solve the problem or fix the desktop. \(\checkmark\) (2)

**QUESTION 4**

4.1 4.1.1 • Network Interface Card \(\checkmark\)  
• Modem or cellular phone attached via Bluetooth or USB cable \(\checkmark\)  
• ISP \(\checkmark\)  
• 3G/4G/HSDPA modem such as USB modem \(\checkmark\) (Any 2) (2)

4.1.2 The line is connected to the Internet permanently. \(\checkmark\) (1)

4.1.3 • Is a digital line. \(\checkmark\)  
• Much faster. \(\checkmark\)  
• A telephone call can be made while on the Internet. \(\checkmark\)  
• Fixed costs (per megabyte) \(\checkmark\)  
(Do not accept permanently connected to the Internet/dedicated line, as it is mentioned in the question.) (Any 2) (2)

4.1.4 Any high speed, \(\checkmark\) high bandwidth \(\checkmark\) Internet connection (2)

4.2 4.2.1 A cap is a limit on the size or amount of data you can download. \(\sqrt{\checkmark}\) (2)

4.2.2 The cost associated with dial-up connections is related to the telephone connection cost/duration of the Internet session, \(\checkmark\) not how much you download. \(\checkmark\) (2)

4.3 4.3.1 Voice is converted into data before being sent as packets across the telephone lines. \(\checkmark\) (1)

4.3.2 Much cheaper than a normal phone call. \(\checkmark\) (1)

4.4 4.4.1 Phishing refers to a situation where a user is lured into giving away personal information such as pin numbers, passwords/financial/personal information \(\checkmark\) by using authentic-looking e-mails. \(\checkmark\) (2)
4.4.2 • Password/PIN numbers controls
• SMS notification of activity on account.
• Terminating banking sessions after a period of time.
• Use of on-screen numeric keypad for PIN numbers.
• Use of secure encryption/protocols such as HTTPS.
• Use of one-time passwords per session delivered to a user’s cellular phone. (Any 2) (2)

4.5 4.5.1 Spyware is software that installs itself without the user’s consent and secretly monitors and reports on the user’s activities on the computer. (2)

4.5.2 A firewall is software used to control access to and from a network. (2)

4.5.3 • Data uses space on a server and not your computer.
• Data can be accessed via the Internet from any computer around the world. (2)

4.5.4 A program that was created deliberately in order to copy itself without the user’s intention or knowledge and perform actions that is unwanted and unexpected. (2)

4.6 4.6.1 A website that can be edited using a normal web browser. No web authoring software needed. (1)

4.6.2 Pre-recorded sound and/or video that can be downloaded and listened to. (1)

4.6.3 Website that has news, a search engine, weather etc. (1)

4.7 • Can be downloaded and then listened to or viewed without having to go on-line.
• Can be run on any computer system.
• Will run without having the software in which it was created.
• Can be viewed on a small portable device. (Any 2) (2)
QUESTION 5

5.1 5.1.1  
- Sharing of expensive hardware √
- Sharing of data √
- Transferring of data and information between computers. √
- Increased control and security √
- Communication √

(Any 3) (3)

5.1.2  
- Easy to add extra equipment/computers to the network. √
- No “messy” wires/cables. √
- They are more flexible. √
- Connections can be made in places where it would be difficult to install a cable. √

(Any 2) (2)

5.1.3  
- Person logging in, needs to be validated (using usernames and passwords). √
- Access to the network is regulated. √
- Access to the network resources and services is controlled. √

(Any 2) (2)

5.2 5.2.1  
- Resolution √
- Optical/Digital Zoom √
- Interface/types of connection √
- Type of memory used to store photos etc. √

(Any 2) (2)

5.2.2  
- Bluetooth √
- Memory Card √

(2)

5.2.3  
- Cellular phone with a built-in camera √
- Smart phone √
- PDA √
- Webcam √

(Any 1) (1)

5.2.4  
- bmp √
- bcx √
- pcx √
- pcix √
- gif √
- tiff √
- jpg √
- jpeg √

(Any 2) (2)

5.3 5.3.1  
A live conversation between two or more users using video and audio. Like sitting next to each other in the same room. √√

(2)

5.3.2  
- Video camera √
- Microphone √
- Speakers √

(Any 2) (2)
5.4 5.4.1 (Unshielded Twisted Pair) A popular type of cable used to connect computers in a network. √

5.4.2 (Internet Protocol Address) A unique identifying address given to each computer on a network. √

5.4.3 (Uninterruptible Power Supply) Provides a computer or network with power from a battery when the power is out. √

QUESTION 6

6.1 6.1.1 An office suite is a collection of programs (software applications), such as word, spreadsheets, database, etc. that integrate with each other. √

6.1.2 Software Piracy √

6.1.3 If it is open source. √

6.1.4 Single user license can only be installed on one computer √ and a site license on as many computers as the company owns on its property. √

6.1.5 Both are free. Freeware is the whole program, √ whereas shareware is only a part of the program meant as a demo. In a game only the first level or only certain functions are available in applications. √

6.2 6.2.1 Because parts of a file are split up into non-continuous areas of the disk √ the parts must first be collected and combined before a file can be used. √ This takes time and thus slows down the computer.

6.2.2 Data on CD’s are permanently burned in. √

6.2.3 Deleted files go to the recycle bin √ and they can be restored or permanently deleted. √

6.3 • To stop anybody editing the document. √
• Can be opened independent of the program it was created in. √
• Usually takes up less space etc. √ (Any 2)

6.4 6.4.1 A wizard is an interactive dialogue that helps you to complete a task by asking questions √ and using your answers to perform the task. √

6.4.2 Communicates instructions from the OS to the hardware device and the other way round. √

6.4.3 Internet. √
    As part of the operating system. √

6.5 OCR software can be used on a scanned document √ to convert the image to editable text. √
QUESTION 7

7.1  All headings and sub headings to be displayed in the contents page have been formatted using styles. √√  (2)

7.1.1  Hyperlinks are shortcuts to specific documents or WebPages. √  
Hyperlinks can also be pointed towards bookmarks, which are specific places within your document. √  (2)

7.1.2  Allows you to send personalised letters to all recipients. √  (1)

7.1.3  Table in a word processing document √  
Table in a database √  
Query in a database √  
Spreadsheet √  (Any 1)  (1)

7.1.4  A dropdown menu where you can choose an option by clicking on the word. √  (1)

7.1.5  Designed specifically for handling records √  
Better querying/reporting facilities √  
More extensive data validation tools and options √  
Easier to link related data in tables √  
Can design better user interfaces using forms, etc. √  (Any 2)  (2)

7.2  No, √ he can use the import function. √  (2)

7.2.1  Text √  (1)

7.2.2  Yes/No (Boolean) √  (1)

7.2.3  Yes, a primary key is a field whose value is unique for each record. √  
The surname field will potentially have duplicate values. √  (2)

7.2.4  Form can be designed to mirror a hardcopy form to facilitate data capturing. √  
Form presents only one record at a time. √  
Easier to restrict access to some fields. √  
Can add meaningful labels and instructions in terms of the format of data e.g. dates. √  (Any 2)  (2)

7.2.5  Input mask √ e.g. to force the user to enter 10 digits for the cellular phone number. √  
Validation rule √ e.g. to check that the user only enters a value of M or F for the gender. √  
Required fields √ e.g. to prevent the user leaving the surname field blank. √  
Field size specifications √ e.g. not allowing the user to enter more than 10 digits for the cellular phone number. √  
Drop down lists √ e.g. so that can enter the number of books outstanding from a list of values. √  
Primary keys √ e.g. to ensure that no duplicate value is entered for the Member Number field, etc. √  (Any 2)  (4)
7.3  7.3.1  Merge cells. √  

7.3.2  Text wrapping. √  

7.3.3  D8: Reference was made to cells where data type cannot be used in calculation. √ Type the numbers and then use format cells to change it to currency or use upper case R sign. √  

7.3.4  The width of column D is too narrow. √  

[28]  TOTAL:  150