



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

COMPUTER APPLICATIONS TECHNOLOGY P2

FEBRUARY/MARCH 2018

MARKS: 150

TIME: 3 hours

This question paper consists of 18 pages.

INSTRUCTIONS AND INFORMATION

1. This question paper consists of:

SECTION A (25 marks)
SECTION B (75 marks)
SECTION C (50 marks)
2. Answer ALL the questions.
3. Number the answers correctly according to the numbering system used in this question paper.
4. Start EACH question on a NEW page.
5. Do NOT write in the right-hand margin of the ANSWER BOOK.
6. Leave a line after EACH subquestion.
7. In general, a mark is allocated per fact. A 2-mark question would therefore require TWO facts, et cetera.
8. Write neatly and legibly.

SECTION A**QUESTION 1: MULTIPLE-CHOICE QUESTIONS**

Various options are provided as possible answers to the following questions. Choose the answer and write only the letter (A–D) next to the question number (1.1–1.10) in the ANSWER BOOK, for example 1.11 D.

- 1.1 Which ONE of the following units refers to processor speed?
- A GHz
 - B dpi
 - C Mbps
 - D ppm
- (1)
- 1.2 The ... operating system utility would be helpful to people who experience challenges using their hands.
- A Sticky Keys
 - B Sticky Notes
 - C Magnifier
 - D Narrator
- (1)
- 1.3 Which ONE of the following acronyms has to do with software licensing?
- A GUI
 - B WWW
 - C WLAN
 - D EULA
- (1)
- 1.4 Which concept does the table below attempt to illustrate?
- | |
|--|
| Application version 1.0 runs on OS version 1.0 |
| Application version 1.0 does not run on OS version 2.0 |
- A Downloading
 - B Archiving
 - C Accessibility
 - D Compatibility
- (1)
- 1.5 Which ONE of the following statements is NOT true about web applications?
- A One may have to pay for the service.
 - B More than one person can work on a document at the same time.
 - C One does not need an Internet connection to access the resources.
 - D Data can be synced across multiple devices.
- (1)

- 1.6 While editing videos on a mobile device, most of the battery life will be used by the ...
- A microphone.
 - B CPU.
 - C screen.
 - D speaker. (1)
- 1.7 Which ONE of the following criteria will retrieve records based on a field value that ends with 'ad'?
- A ad*
 - B ad
 - C a*d
 - D *ad (1)
- 1.8 The main task of the Disk Cleanup utility is to ...
- A delete individual files selected by the user.
 - B automatically delete unused files.
 - C format the hard disk when it is full.
 - D reorganise files and keep related files together. (1)
- 1.9 Which ONE of the following acronyms is NOT associated with hardware?
- A HDD
 - B NIC
 - C EULA
 - D BYOD (1)
- 1.10 A/An ... is NOT an example of malware.
- A trojan
 - B ad-blocker
 - C worm
 - D keylogger (1)

[10]

QUESTION 2: MATCHING ITEMS

Choose a term/concept from COLUMN B that matches the description in COLUMN A. Write only the letter (A–T) next to the question number (2.1–2.10) in the ANSWER BOOK, for example 2.11 U.

COLUMN A		COLUMN B	
2.1	Currently the fastest standard for cellular data transmission	A	caching
2.2	A square grid made up of tiny black-and-white squares which represent text, such as a URL	B	BYOD
2.3	A technique used by web browsers to store recently visited pages or content	C	Instagram
2.4	A communication technology that requires a pairing process	D	ROUNDDOWN
2.5	A policy that allows you to use your own computing device on a workplace network	E	VR
2.6	A technology that uses equipment that allows a user to interact with an imaginary world	F	data cap
2.7	An example of software used for video conferences	G	Skype
2.8	A technique used by ISPs to prioritise some services	H	ROUNDUP
2.9	A spreadsheet function that will return a value of 8 when applied to the number 7.4	I	3G
2.10	An unwanted advertising e-mail sent to a large number of users	J	barcode
		K	spam
		L	shaping
		M	phishing
		N	QR code
		O	Wi-Fi
		P	LTE
		Q	OCR
		R	Bluetooth
		S	history
		T	podcast

(10 x 1)

[10]

QUESTION 3: TRUE/FALSE ITEMS

Indicate whether the following statements are TRUE or FALSE. Choose the answer and write 'true' or 'false' next to the question number (3.1–3.5) in the ANSWER BOOK. Correct the statement if it is FALSE. Change the underlined word(s) to make the statement TRUE. (You may not simply use the word 'NOT' to change the statement.)

NO mark will be awarded if only FALSE is written down.

EXAMPLES:

QUESTION	ANSWER
<u>Google</u> is the world's most popular search engine.	True
An <u>NIC</u> has slots for hardware components, such as the CPU.	False – motherboard

- 3.1 A social network blocks hacking attempts from the Internet to a LAN. (1)
- 3.2 A keylogger is an advertisement that opens in a new web browser window while the user is working on the computer. (1)
- 3.3 A DoS attack occurs when a computer or network is flooded with a huge amount of useless data. (1)
- 3.4 Automatic index is a term used to describe pre-set formatting. (1)
- 3.5 A task definition is a set of questions that can have a selection of possible answers to choose from. (1)

[5]

TOTAL SECTION A: 25

SECTION B**QUESTION 4: SYSTEMS TECHNOLOGIES**

- 4.1 Why do many users prefer using an external mouse on a laptop computer that has a built-in trackpad? (1)
- 4.2 Give TWO reasons why one would buy laptop computers instead of desktop PCs for a CAT classroom. (2)
- 4.3 State TWO disadvantages of SSDs in comparison with hard disk drives. (2)
- 4.4 Smartphones have become very popular.
- 4.4.1 Give TWO examples of how smartphones can be used for educational purposes in the classroom. (2)
- 4.4.2 Discuss TWO disadvantages of using smartphones for playing games instead of using desktop PCs. (2)
- 4.4.3 Suggest TWO ways to wirelessly connect smartphones to other devices (NOT to other smartphones). (2)
- 4.4.4 How would one know that the geotagging feature of a smartphone was used when a photo was taken? (1)
- 4.5 Micro USB ports are commonly used in smartphones.
- 4.5.1 Why do these devices not have a standard USB port? (1)
- 4.5.2 Besides smartphones/cellphones, give TWO examples of ICT devices that use micro USB ports. (2)
- 4.6 You received an e-mail attachment with the file name *Image01.exe*.
- 4.6.1 Why should you NOT open this attachment? (1)
- 4.6.2 Suggest ONE way to deal with this attachment. (1)
- 4.7 Give TWO reasons why one should not use a pirated antivirus program? (2)
- 4.8 Suggest TWO ways to troubleshoot a computer that repeatedly does not load the operating system after it is switched on. (2)
- 4.9 Discuss TWO reasons why a CD created by your friend does not work on your computer. (2)
- 4.10 State TWO benefits of installing the latest operating system patches. (2)

[25]

QUESTION 5: INTERNET AND NETWORK TECHNOLOGIES

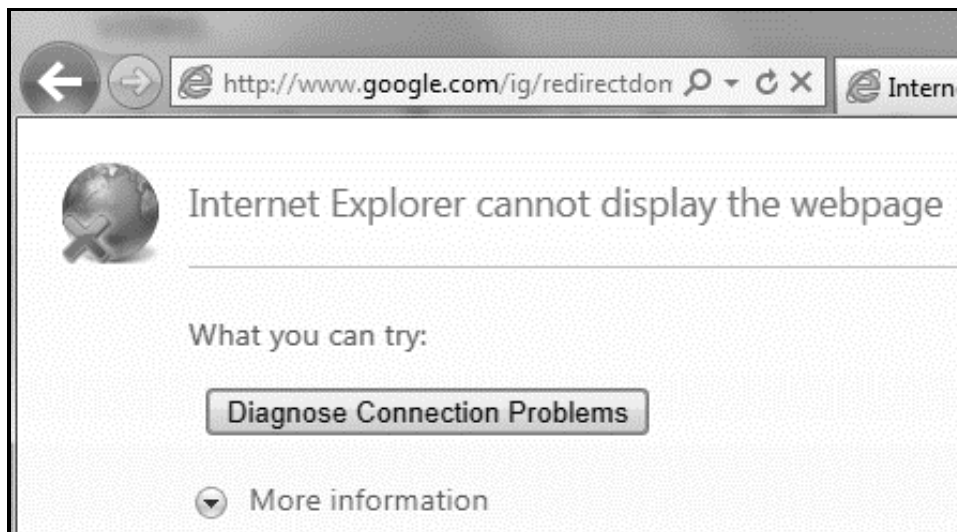
5.1 Consider the packages below that advertise Internet access for video streaming at home.

PACKAGE A	PACKAGE B	PACKAGE C
5 GB data Fibre 100 Mbps Free installation + Router R399 p.m.	5 GB data ADSL 2 Mbps Free installation + Router R99 p.m.	Uncapped data Fibre 40 Mbps Free installation + Router R399 p.m.

5.1.1 Which package would one use to daily stream HD videos at home? Give TWO reasons for your answer. (3)

5.1.2 Which package would be sufficient for general home use, such as sending e-mails and browsing the web, for which no video streaming is required? Motivate your answer. (2)

5.2 The web browser message below is displayed even when an ADSL connection is working.



5.2.1 Give TWO possible reasons for receiving this message. (2)

5.2.2 What is the function of the circular arrow to the right of the address bar? (1)

5.2.3 Comment on the security of the intended connection, based on the information in the URL. (2)

- 5.3 Criminals often use hotspots to target unsuspecting users.
- 5.3.1 How would one use a mobile device to check if a hotspot is available? (1)
- 5.3.2 How can one prevent a keylogger from sending information back to the hacker? (2)
- 5.4 Give ONE reason why one would install a browser plug-in. (1)
- 5.5 How would an RSS feed on a blog benefit its users? (1)
- [15]**

QUESTION 6: INFORMATION MANAGEMENT

- 6.1 When does data become information? (1)
- 6.2 Explain why using an online questionnaire is an efficient option for gathering data, by referring to:
- Data capture
 - Data processing (2)
- 6.3 The following rule was entered into a database to prevent inaccurate input:
- ≤ 0 OR ≥ 18
- Give TWO reasons why irrelevant or unusable data can still be entered. (2)
- 6.4 Explain why you would NOT use information found on the Internet, even if it was written by an expert author. (2)
- 6.5 What word processing feature could be used to view the changes made by multiple authors to a single document? (1)
- 6.6 How can one prevent changes being made to a spreadsheet opened in a spreadsheet application? (1)
- 6.7 How can one prevent the input of duplicate records when capturing data in a database table? (1)
- [10]**

QUESTION 7: SOCIAL IMPLICATIONS

- 7.1 Give ONE indication that a message you have received is a hoax. (1)
- 7.2 State TWO ways in which ICTs may negatively impact the workplace. (2)
- 7.3 Why are governments concerned about the widespread use of Bitcoin? (2)
- 7.4 Telecommuting saves time and travelling costs.
Why do many employers still not allow telecommuting? (2)
- 7.5 Smart home appliances can connect to the Internet.
State ONE advantage of having Internet-connected (IoT) appliances, such as a washing machine. (1)
- 7.6 Besides cheating, discuss TWO reasons why some schools ban the use of smartphones. (2)

[10]

QUESTION 8: SOLUTION DEVELOPMENT

- 8.1 Give a reason why an HTML page you created is not opening in a browser. (1)
- 8.2 How would you ensure that pictures in an HTML document are not too small or too large when viewed in a browser? (1)
- 8.3 The field names below were used in a database table to store the records of community members.

Field Name	Data Type	Description
Name	Short Text	Name of member
Address	Short Text	Residential address
Gender		
Age	Number	Age on 1 January
School	Short Text	Name of school
Notes	Short Text	Additional comments

- 8.3.1 Explain why none of the fields above can be used as a primary key. (1)
- 8.3.2 Suggest TWO data types for the *Gender* field so that one would not need to use a keyboard to input values into the table. (2)
- 8.3.3 Name a database feature that could be used to automatically place the same data into the *School* field for each new record. (1)
- 8.3.4 Currently a maximum of only 255 characters can be entered in the *Notes* field.
How can one store more text in the *Notes* field? (1)
- 8.4 What feature of a word processing application allows you to copy formatting quickly from one section to another? (1)
- 8.5 You pasted the following data, separated by tabs, from Notepad into a word processing document:

```

Piet      →      Retief      →      39¶
Nandipha →      Bele      →      23¶
John     →      Kuhn      →      18¶

```

- State TWO ways in which this text can be placed in a table with three columns and three rows. (2)

8.6 The spreadsheet below shows supermarket employee wages.

	A	B	C	D	E
1	ABC Supermarket				
2					
3	Name of employee	Hours worked	Wages per hour	Weekly bonus	Total
4	Zulu TC	27	R 10.00	200	#####
5	Maistry M	34	R 10.00	0	#####
6	Rooyen G	30	R 10.00	0	#####

8.6.1 The values in the *Total* column are not displayed. What can be done to display these values correctly, without changing any formatting? (1)

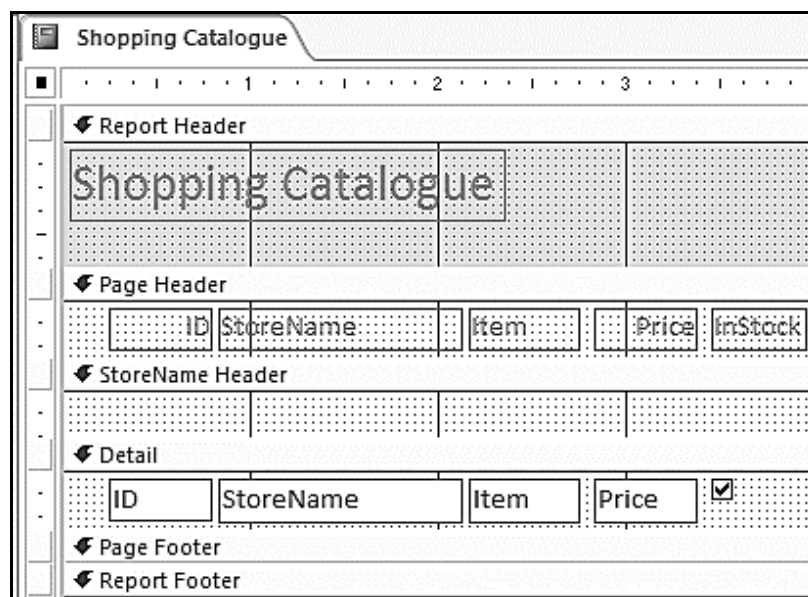
8.6.2 The function below (used in column D) fails to allocate a bonus to employees who worked longer than 27 hours per week:

$$=IF(B4<=27,200,0)$$

Discuss TWO alternative ways in which the mistake in the function could be corrected. (2)

8.6.3 Which spreadsheet function would one use to determine the number of bonuses paid to employees? (1)

8.7 On which field was the report below grouped?



(1)
[15]

TOTAL SECTION B: 75

SECTION C: INTEGRATED SCENARIO**QUESTION 9**

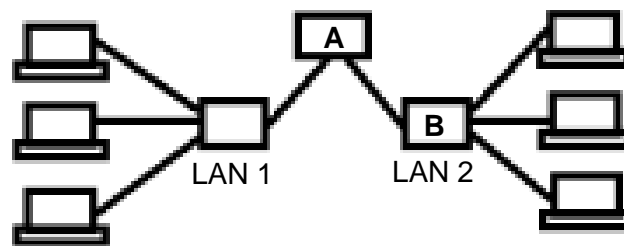
Your school principal asked you to use your CAT skills to give advice with establishing an online school newspaper. Computer equipment will have to be purchased for this purpose.

9.1 Describe TWO hardware characteristics of entry-level computers that make them different from high-end machines. (2)

9.2 Suggest TWO examples of application software that may need to be installed to facilitate the publishing of the school newspaper. (2)

9.3 The home page of the newspaper website will be based on a template.
Explain what a *template* is. (1)

9.4 As part of your advice you drew a diagram of how the newspaper office network (LAN 1) should be connected to the school network (LAN 2).



9.4.1 Name device **A** connecting the two LANs. (1)

9.4.2 Name device **B** on LAN 2. (1)

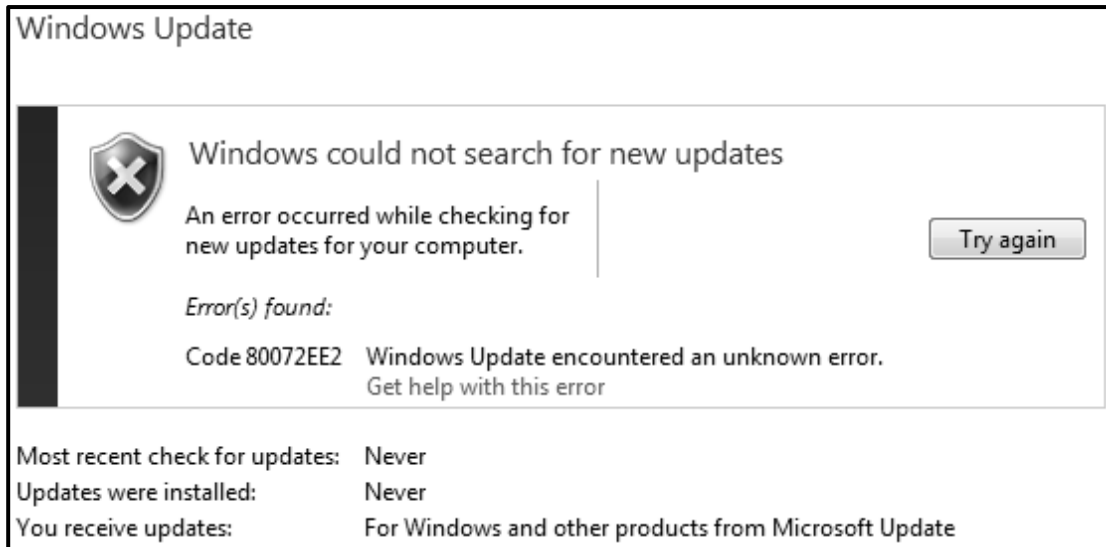
9.4.3 State TWO ways in which access to the LAN 1 network can be controlled. (2)

9.4.4 State TWO advantages of using cables to connect the computers in the network. (2)

9.5 Links to the newspaper articles will be posted on social media.
State TWO advantages of using Facebook to share the newspaper. (2)

9.6 Give ONE reason why FOSS instead of proprietary software should be used at the newspaper office. (1)

- 9.7 The error message below appeared on one of the computers in the newspaper office, preventing it from getting updates.



- 9.7.1 Discuss TWO possible reasons for the error. (2)
- 9.7.2 State ONE implication of the error message. (1)
- 9.8 State TWO ways in which the school can backup their data so that it is stored in another location. (2)
- 9.9 A database table with author and article names as fields will be used to store the information about learners who contribute towards content in the newspaper.
- 9.9.1 Discuss TWO reasons why it would be better to use a form instead of the datasheet view of a table for capturing data. (2)
- 9.9.2 Name TWO database tools that can be used to determine who contributed the most articles towards the newspaper. (2)
- 9.10 Give TWO reasons why it would be a good policy to have USB ports disabled by default on the LAN used by the newspaper office? (2)
- [25]

QUESTION 10

Your school is hosting a talent concert. You have been asked to help with ICT-related matters.

10.1 Many learners would like to access profiles of participants using the Internet.

10.1.1 Name TWO hand-held mobile devices that can be used for this purpose. (2)

10.1.2 State TWO disadvantages for participants of having profiles that are accessible on the Internet. (2)

10.1.3 State TWO ways in which to ensure that it is legal to use pictures sourced from the Internet. (2)

10.1.4 The following HTML code will be used to display a table with information about each contestant:

```
<table border="2" cellpadding="1" cellspacing="4">  
  <tr> <td colspan="2"> </td> <td> </td> </tr>  
  <tr> <td> </td> <td> </td> <td> </td> </tr>  
</table>
```

How many rows and columns are there in the table? (2)

10.2 You are required to assist with upgrading the old and slow computers for the talent concert.

10.2.1 Give TWO software-related reasons why these computers may have slowed down. (2)

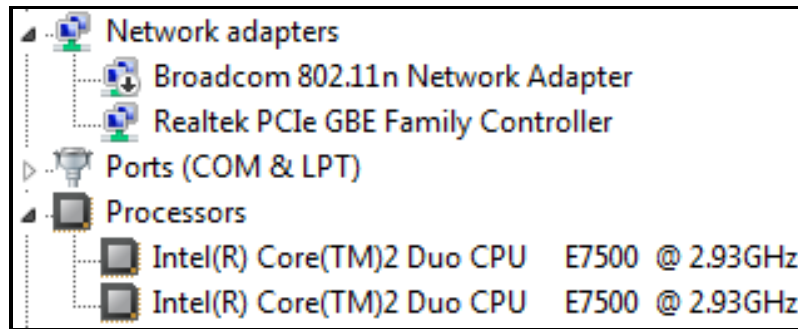
10.2.2 What hardware components on old computers must commonly be replaced to improve performance? (2)

10.2.3 Some recently installed applications are not working after hardware upgrades.

Discuss TWO ways in which this problem can be resolved. (2)

10.2.4 Suggest TWO strategies to deal with computers that cannot be upgraded. (2)

10.3 The screenshot below contains system information of a computer that will be used for the talent concert.



10.3.1 There is one CPU in the computer.

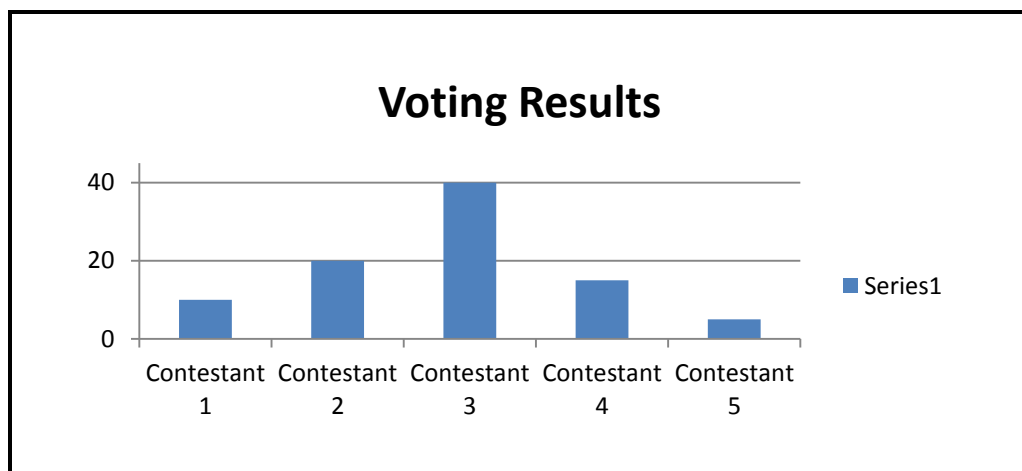
Why does the CPU appear twice under *Processors*?

(1)

10.3.2 What is the role of the Broadcom 802.11n Network Adapter?

(1)

10.4 The spreadsheet chart below was used to analyse voting results.



10.4.1 State TWO features that could have been added to this chart to improve understanding.

(2)

10.4.2 Name TWO spreadsheet tools, other than the chart, that could have been used to analyse the voting results.

(2)

10.5 The table and query result below were used by the judges to analyse competition results.

Contestant	Score
1	7
2	4
5	3
2	6
2	7
4	9
3	4
1	10
2	2

Contestant	AvgOfScore
2	4.75

10.5.1 What data type was used for the field *Score*? Motivate your answer. (2)

10.5.2 There are four records for Contestant 2 in the database table.

How was the average function used to return only one row? (1)

[25]

TOTAL SECTION C: 50
GRAND TOTAL: 150



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MARKING GUIDELINES

MARKS: 150

These marking guidelines consist of 13 pages.

SUGGESTIONS AND RECOMMENDATIONS TO MARKERS

- Revisit the questions and the marking guidelines frequently during the marking session.
- It is advisable to read the question frequently (and re-read) together with the candidate's response to check that it correlates, so that you are not misled by the candidate's statements/answers.
- Be careful not to focus on keywords or general statements, but rather read the entire answer. If in doubt, read the entire answer and then the question paper and marking guidelines. Ask yourself or your senior marker if the response could 'fit' into the marking guidelines before allocating the correct marks to the candidate. For example, the marking guidelines state 'cheap' and the learner responds with 'less expensive'.
- Beware of overlapping answers to a specific question. In general, one mark is awarded per fact.

SECTION A**QUESTION 1: MULTIPLE-CHOICE**

1.1	A	✓	1
1.2	A	✓	1
1.3	D	✓	1
1.4	D	✓	1
1.5	C	✓	1
1.6	B	✓	1
1.7	D	✓	1
1.8	A/B	✓	1
1.9	C	✓	1
1.10	B	✓	1
Total: [10]			

QUESTION 2: MATCHING ITEMS

2.1	P	✓	1
2.2	N	✓	1
2.3	A	✓	1
2.4	R	✓	1
2.5	B	✓	1
2.6	E	✓	1
2.7	G	✓	1
2.8	L	✓	1
2.9	H	✓	1
2.10	K	✓	1
Total: [10]			

QUESTION 3: TRUE OR FALSE

<i>(Note to marker: Do not award a mark if only 'FALSE' is written down.)</i>		
3.1	FALSE, Firewall/Router✓	1
3.2	FALSE, Pop-up✓	1
3.3	TRUE✓	1
3.4	FALSE, Styles/Templates✓	1
3.5	FALSE, Questionnaire/Survey✓	1
		[5]

TOTAL SECTION A: [25]

SECTION B**QUESTION 4: SYSTEMS TECHNOLOGIES**

4.1	<ul style="list-style-type: none"> • More convenient/Easier to use/User is more familiar with a mouse • More accurate mouse movements • Ergonomic design of the mouse <p style="text-align: right;">✓ (Any one)</p>		(1)
4.2	<ul style="list-style-type: none"> • Laptops can be locked away • Battery can allow use during power outages • (Generally) consumes less power • Mobility makes it easy to set up any room for tests and exams, or to be used for different purposes <p style="text-align: right;">✓✓ (Any two)</p>		(2)
4.3	<ul style="list-style-type: none"> • SSDs are more expensive per GB of storage • They are not good for long term (archiving) storage (lose charge) • Write cycles are limited <p style="text-align: right;">✓✓ (Any two)</p>		(2)
4.4.1	<ul style="list-style-type: none"> • Access to updated information on the Internet • Take a picture of homework • Use social networking for collaboration • Use for reading digital/electronic version of textbooks • Interact with electronic quizzes <p style="text-align: right;">✓✓ (Any two)</p> <p><i>(Note to marker: Accept any valid example that has educational value)</i></p>		(2)
4.4.2	<ul style="list-style-type: none"> • Limited Battery life • Limited controls • Small screen size • Overheating issues • Lower screen resolution <p style="text-align: right;">✓✓ (Any two)</p>		(2)
4.4.3	<ul style="list-style-type: none"> • Wi-Fi • NFC • Bluetooth <p style="text-align: right;">✓✓ (Any two)</p>		(2)
4.4.4	Location information is added to the photo (as metadata) ✓	(1)	(7)

4.5.1	Devices are too small/Standard USB connectors are too large✓	(1)	
4.5.2	<ul style="list-style-type: none"> • Tablets • Flash storage • Rechargeable headphones/speakers • Digital cameras • Power banks <p style="text-align: right;">✓✓ (Any two)</p> <p><i>(Note to marker: Accept valid examples such as tablet keyboard, dashcam)</i></p>	(2)	(3)
4.6.1	<ul style="list-style-type: none"> • The attachment is an exe file which could be a virus • Exe is not an image file extension <p style="text-align: right;">✓ (Any one)</p>	(1)	
4.6.2	<ul style="list-style-type: none"> • Delete the e-mail • Save and scan the attachment with an antivirus program • Do not open the attachment <p style="text-align: right;">✓ (Any one)</p>	(1)	(2)
4.7	<ul style="list-style-type: none"> • Virus/malware infection • Could open your computer to being hacked • Legal consequences • Cannot be updated/Manufacturer may disable software during update attempt <p style="text-align: right;">✓✓ (Any two)</p>		(2)
4.8	<ul style="list-style-type: none"> • Start up in safe mode • Re-install operating system/Format storage media (HDD/SDD)/Try to boot from recovery disk/media • Check boot sequence in BIOS • Remove external storage from USB ports and try again • Test the power supply • Check the primary hard drive and replace if necessary <p style="text-align: right;">✓✓ (Any two)</p>		(2)
4.9	<ul style="list-style-type: none"> • It was created using multi-session/the session was not closed • The optical drive is faulty on either one of the computers • Incorrect label placement • The file system is not supported • The CD was not properly written <p style="text-align: right;">✓✓ (Any two)</p>		(2)
4.10	<ul style="list-style-type: none"> • Fixes program bugs • Addresses security vulnerabilities • Adds features to the operating system • Fewer system crashes/More system stability <p style="text-align: right;">✓✓ (Any two)</p>		(2)
			[25]

QUESTION 6: INFORMATION MANAGEMENT

6.1	When data is processed/becomes meaningful✓ <i>(Note to marker: Accept examples showing data to information e.g. adding headings to columns.)</i>		(1)
6.2	<ul style="list-style-type: none"> • Reach a larger audience • Distance is not an issue • Data capture can be automated <p style="text-align: right;">✓ (Any one)</p> <p>AND</p> <ul style="list-style-type: none"> • Responses can be collated into a spreadsheet • Responses can be analysed automatically <p style="text-align: right;">✓ (Any one)</p>		(2)
6.3	Negative ages/numbers will be accepted✓ Very high ages will be accepted/there is no limit to how high a number may be✓		(2)
6.4	<ul style="list-style-type: none"> • It may be old information • Information may be biased • Information may not be accurate/contrary to other expert authors • Search criteria may be irrelevant <p style="text-align: right;">✓✓ (Any two)</p>		(2)
6.5	Track changes✓		(1)
6.6	<ul style="list-style-type: none"> • Lock cells • Protect the sheet/add a password • Make the file read only <p style="text-align: right;">✓ (Any one)</p>		(1)
6.7	<ul style="list-style-type: none"> • Use a primary key • Use indexing (No duplicates) property <p style="text-align: right;">✓ (Any one)</p>		(1)
			[10]

QUESTION 7: SOCIAL IMPLICATIONS

7.1	<ul style="list-style-type: none"> • It requests to be forwarded to many other people • You receive the same message from many people • It could include a threat • Difficult to verify • Highly emotional content <p style="text-align: right;">✓ (Any one)</p>		(1)
7.2	<ul style="list-style-type: none"> • Could lead to job losses • Distracts employees (lowers productivity) • Increase in electricity consumption • Networks can be hacked into • Employees use work place resources for their own benefit / /Employees may increase company risk by downloading viruses and torrents • May lead to lack of trust between employer and employee <p style="text-align: right;">✓✓ (Any two)</p>		(2)
7.3	<ul style="list-style-type: none"> • Government has no control over transactions • No tax can be generated from transactions • No consumer protection rights if unhappy with purchase • It is often used as payment in illegal activities • Rapid fluctuation in value may put citizens at risk <p style="text-align: right;">✓✓ (Any two)</p>		(2)
7.4	<ul style="list-style-type: none"> • Employer cannot track working hours/may not trust employee to work the hours he should • Employer expense to set up ICT systems to accommodate telecommuting • Work is dependent on a stable Internet connection/electricity supply <p style="text-align: right;">✓✓ (Any two)</p> <p><i>(Note to marker: Accept any other valid reason.)</i></p>		(2)
7.5	<ul style="list-style-type: none"> • Appliances can be started remotely before getting home • Check on the status of appliance • Manufacturer can diagnose problems without visiting • Firmware can be upgraded • Usage can be monitored • Data can be retrieved from these devices <p style="text-align: right;">✓ (Any one)</p>		(1)
7.6	<ul style="list-style-type: none"> • Distraction to learning • Sharing of sensitive pictures • Theft creates unnecessary disciplinary issues for the school • Learners may develop anti-social behaviour <p style="text-align: right;">✓✓ (Any two)</p>		(2)
			[10]

QUESTION 8: SOLUTION DEVELOPMENT

8.1	Not saved with an html extension/<html> beginning and end tags omitted✓		(1)
8.2	Specify the size/Resize/ Adjust the width and height of the picture✓		(1)
8.3.1	All fields may hold duplicate values✓		(1)
8.3.2	Yes/No/Boolean✓ Lookup wizard✓		(2)
8.3.3	Default value✓		(1)
8.3.4	Change data type to Memo/Long Text✓		(1)
8.4	Format Painter✓		(1)
8.5	<ul style="list-style-type: none"> • Insert table on the text • Convert text to table • Copy text and paste into table • Use the Draw Table option <p style="text-align: right;">✓✓ (Any two)</p>		(2)
8.6.1	Increase column width		(1)
8.6.2	<ul style="list-style-type: none"> • Change the condition to greater than or equal to 28/Change to greater than 27 • Swop the TRUE and FALSE arguments/Swop the position of 200 and 0 <p style="text-align: right;">✓✓ (Any two)</p>		(2)
8.6.3	COUNTIF✓		(1)
8.7	StoreName✓		(1)
			[15]

TOTAL SECTION B: [75]

SECTION C**QUESTION 9: INTEGRATED SCENARIO**

9.1	<ul style="list-style-type: none"> No dedicated graphics card/Integrated graphics Low resolution screen Small screen size Low amount of RAM Slow/outdated CPU No sound card Reduced number of ports Slower bus speeds Smaller HDD 	✓✓ (Any two)	(2)
9.2	<ul style="list-style-type: none"> Word processor: Microsoft Word/Libre Office Writer Document publisher: Microsoft Publisher Web development tool: Dreamweaver/Frontpage/Notepad++ Browser: Internet Explorer/Edge/Chrome/Firefox Image manipulation software: Photoshop/Gimp, etc. <p style="text-align: right;">✓✓ (Any two)</p> <p><i>(Note to marker: Accept only one correct example of each type of software application)</i></p>		(2)
9.3	Template has pre-set formatting and layout✓		(1)
9.4.1	A – Router/Gateway/Switch✓	(1)	
9.4.2	B – Switch/Gateway/Router/Repeater/Hub✓	(1)	
9.4.3	<ul style="list-style-type: none"> Install a firewall Every user should have their own profile/login details Secure/Lock the room <p style="text-align: right;">✓✓ (Any two)</p>	(2)	
9.4.4	<ul style="list-style-type: none"> Better security Better data transfer rates Not affected by weather or physical obstructions <p style="text-align: right;">✓✓ (Any two)</p>	(2)	
9.5	<ul style="list-style-type: none"> Wider audience People can comment on articles Automatic notifications to audience about new articles Analytics on audience is possible No printing costs <p style="text-align: right;">✓✓ (Any two)</p>		(2)

9.6	<ul style="list-style-type: none"> Source code is available in FOSS FOSS is free Proprietary source code is not available Proprietary software may not be free 	✓ (Any one)	(1)
9.7.1	<ul style="list-style-type: none"> There is no Internet connection Computer has a virus Prevented by firewall settings Not a licenced copy of Windows/Corrupted windows files 	✓✓ (Any two)	(2)
9.7.2	<ul style="list-style-type: none"> Windows will be vulnerable to security threats Bugs in the operating system or other applications will not be fixed Newer features will not be added 	✓ (Any one)	(1)
9.8	Backup to a cloud service✓ Backup to an external storage that can be moved✓		(2)
9.9.1	<ul style="list-style-type: none"> User friendly layout Allows for single record view Images can be inserted for visual appeal 	✓✓ (Any two)	(2)
9.9.2	<ul style="list-style-type: none"> Query Filter Sort Grouping 	✓✓ (Any two)	(2)
9.10	<ul style="list-style-type: none"> May prevent data theft May prevent malware from external storage devices May prevent unnecessary data from being loaded onto the computer 	✓✓ (Any two)	(2)
			[25]

QUESTION 10: INTEGRATED SCENARIO

10.1.1	<ul style="list-style-type: none"> • Tablet • Smartphone • Phablet 	✓✓ (Any two)	(2)	
10.1.2	<ul style="list-style-type: none"> • Cyber stalking • Data mining for advertising • Cyber bullying 	✓✓ (Any two)	(2)	
10.1.3	<ul style="list-style-type: none"> • Get permission from the owner • Acknowledge the source of the picture • Determine licence terms for images/Creative Commons licence 	✓✓ (Any two)	(2)	
10.1.4	2 Rows ✓ and 3 Columns ✓		(2)	(8)
10.2.1	<ul style="list-style-type: none"> • Viruses • Too many applications installed • Two anti-virus programs installed at the same time • New software demands on hardware • Old operating system • Too many applications launch automatically on start up • Disk may be fragmented 	✓✓ (Any two)	(2)	
10.2.2	<ul style="list-style-type: none"> • RAM • Hard drive • CPU 	✓✓ (Any two)	(2)	
10.2.3	<ul style="list-style-type: none"> • Upgrade operating system/Repair/Install Windows • Install patches • Install service pack 	✓✓ (Any two)	(2)	
10.2.4	<ul style="list-style-type: none"> • Give to a charity organisation • Dispose in an environmentally friendly way • Sell off parts 	✓✓ (Any two)	(2)	(8)
10.3.1	CPU has two cores✓		(1)	
10.3.2	Gives wireless/WiFi✓ network access		(1)	(2)

10.4.1	<ul style="list-style-type: none"> • Legend has meaningful names • Minor gridlines • Axis titles • Data labels, etc. <p style="text-align: right;">✓✓ (Any two)</p>	(2)	(4)
10.4.2	<ul style="list-style-type: none"> • Conditional formatting • Sorting • Filters • Functions • Pivot table/chart • Subtotal/outline <p style="text-align: right;">✓✓ (Any two)</p> <p><i>(Note to marker: Do not accept any references to normal formatting like bold, font colours, etc.)</i></p>	(2)	
10.5.1	Number/number based datatype✓ There is a calculation in the query based on this field✓	(2)	
10.5.2	Totals/Group by✓ was used to get the average of all 4 records	(1)	(3)
			[25]

TOTAL SECTION C: 50
GRAND TOTAL: 150