



**COMPUTER APPLICATIONS TECHNOLOGY
REVISION BOOKLET 2025
TERM 3 & 4**

Grade 11



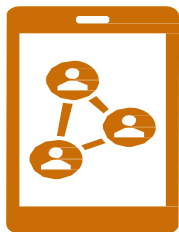
This revision program is designed to assist you in revising the critical content and skills covered during the Third term. The purpose is to prepare you to understand the key concepts/skills and to provide you with an opportunity to establish the required standard and the application of the knowledge necessary to succeed in the examination.

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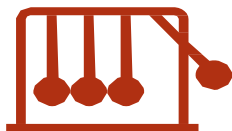
PURPOSE OF THE REVISION SUPPORT PACKAGE



The aim of this Revision Package is for learners to use in their own learning, self-paced with little assistance by a teacher/tutor.

This package will constitute the revision materials for grade 11 CAT for some of the content that was done for 2025 in Term 3 according to the WCED ATPs.

DESIGN ELEMENTS OF THE PACKAGE



The design elements for this resource which consists of Theory and Practical questions, will consist of:

CONTENT AND QUESTIONS

The content covered is Theory and Practical content:

1. System Technologies
 - Software
 - Hardware
 - Computer Management
- 2 . Internet Technologies
 - Internet
 - WWW
3. Communications
4. Social implications
5. Information Management
6. Solution Development:
7. A memorandum/solutions



DATAFILES

Datafiles: <https://wcedportal.co.za/eresource/204111>

WHEN ANSWERING QUESTIONS ON SECTION A: SHORT QUESTIONS



Questions are similar to what can be expected in Section A of the final Exam Theory papers.

SHORT QUESTIONS

| When answering the **multiple-choice questions**, you are urged NOT to leave any of the questions unanswered.

| Select one of the 4 options given to you. | You have a 25% chance of "guessing" correct answer.

| The same advice is given when answering the Matching Column questions: you are urged NOT to leave any of the questions unanswered.

| The question on True or False is a tricky question in the sense that, if you answer you need to submit the correct alternative to the bold, underlined word/phrase. | A mere "False" will not score you a mark; you need to provide the correct answer.

| When you draw a blank and are unable to answer a True or False question, opt to answer that question with a "True". | Do NOT leave the question unanswered. You have a 50% chance to score a mark if you answer "True".

| Remember: Section A questions cover the whole curriculum. | Be well prepared for all aspects of the Theory section.

System technologies, Internet technologies, Social Implications and Information Management

SHORT QUESTIONS

Matching Items

Match the description/ explanation in column A with the correct answer in column B.

Column A		Column B	
1.	A global collection of networks	A.	rootkit
2.	A person who accesses a computer/network illegally with the intention of performing some crime	B.	HTML
3.	Software programs designed to run on smartphones.	C.	multi-processing
4.	Downloading and distributing movies illegally.	D.	ROM
5.	A protocol used to transfer web pages.	E.	Internet
6.	Making use of quadcore processors to increase a computer's speed.	F.	NFC
7.	Software used to convert hardcopy text into digital text that can be edited.	G.	piracy
8.	A type of memory where a computer's start up instructions are stored.	H.	EFT
9.	A standard that allows devices like smartphones to connect wirelessly simply by touching them together or bringing them into close proximity	I.	hacker
10.	A method of transferring money electronically over the Internet.	J.	GPS
11.	Technology used in mobile devices to determine your location.	K.	AUP
12.	A policy which defines users' rights and responsibilities within a network.	L.	apps
13.	Information about the size of an image or who the author is of a text document.	M.	Netiquette
14.	The practice of respecting other peoples' privacy and not doing anything online that will annoy or frustrate them.	N.	OCR
15.	A way to connect your smartphone to your computer.	O.	cracker
		P.	plug-in
		Q.	RSS aggregator
		R.	privacy
		S.	Metadata
		T.	USB cable

Multiple-choice questions

Choose the correct answer and write only the letter next to the relevant number.

1. A collection of fixes, updates and new features since the release of the original software is usually referred to as ...
 - A. a patch.
 - B. a service pack.
 - C. an upload.
 - D. a driver.
2. Computers that are commonly used in large organisations because they can process bulk data.
 - A. Mainframe computers
 - B. Super computers
 - C. Personal computers
 - D. Mini computers
3. The digital divide is most likely caused by the ...
 - A. differences in people's educational and cultural levels.
 - B. lack of money to purchase and access technology.
 - C. age gap and physical disabilities that people may have.
 - D. stockpiling of redundant and old computing devices.
4. Which ONE the following options would best arrange the computing devices in decreasing order of their computing capabilities?
 - A. PDA, personal computer, mainframe, server
 - B. Server, personal computer, mainframe, PDA
 - C. PDA, personal computer, server, mainframe
 - D. Mainframe, server, personal computer, PDA
5. Which ONE of the following statements would best describe 'bandwidth'?
 - A. A permanent digital connection to the Internet.
 - B. An Asymmetrical Digital Synchronous Line connection.
 - C. The amount of data transferred over a connection in a set time.
 - D. The speed at which data is transmitted over a connection.
6. Which ONE of the following is an input device?
 - A. webcam
 - B. headphones
 - C. printer
 - D. data projector
7. Which ONE of the following is NOT an example of *metadata*?
 - A. The author of a document
 - B. The styles used in a word processing document
 - C. The date on which a document was last modified
 - D. The resolution of an image stored as a graphics file
8. Which ONE of the following is an example of a dedicated e-reader?
 - A. iPad
 - B. Notebook
 - C. Phablet
 - D. Kindle

9. Which ONE of the following is NOT a web browser?
 - A. Mozilla Firefox
 - B. Internet Explorer
 - C. Google Chrome
 - D. Outlook Express
10. Telkom is an example of a...
 - A. Web browser
 - B. Search engine
 - C. Website
 - D. ISP
11. Which ONE of the following acronyms is NOT associated with hardware?
 - A. SSD
 - B. BYOD
 - C. EULA
 - D. GPU
12. A/An ... is an example of malware.
 - A. ad-blocker
 - B. popup
 - C. spam filter
 - D. keylogger
13. The letters a/b/g/n refer to data transmission over a/an ... connection.
 - A. ADSL
 - B. Wi-Fi
 - C. 3G
 - D. Fibre
14. Which CPU in the following list is the best choice for a gaming laptop/desktop?
 - A. i5 quad core
 - B. i7 quad core
 - C. i3 quad core
 - D. Celeron
15. If the colour of an image displayed by a projector appears to be overall too light or too dark, it may be corrected by changing the ... of the projector.
 - A. contrast
 - B. brightness
 - C. resolution
 - D. position

(15)

True / False items

Indicate whether the following statements are TRUE or FALSE. 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>Windows 10</u> is the most common operating system installed on new laptops.	True
A <u>NIC</u> has slots for hardware components, such as the CPU.	False – motherboard

1. Formatting can be used to automatically arrange specific values in a spreadsheet according to specific criteria.
2. A computer that has been taken over by a hacker is called a pirate.
3. A printer is an example of an output device.
4. A multi-touch screen offers more functionality without using menus.
5. A solid-state drive has no moving parts, thus making it quieter and more robust.
6. The term Virtual Reality (VR) is associated with simulation of a 3D environment.
7. ICT refers to the trend whereby all sorts of objects and devices are increasingly being connected to one another via the Internet.
8. Freeware refers to software that has copyright but may be copied for the purpose of trying it out, with the understanding that an amount should be paid for continuous use.

(8)

CONTENT BASED QUESTIONS

Please answer the following questions as comprehensive as possible:

1. The World Wide Web is often loosely referred to as the *multimedia content* part of the internet. What do we mean by the term *multimedia*? (2)
2. What do we mean when we say that programs are not compatible with each other? (2)
3. Your teacher received a sample work scheme from the department, but she could not open it. Someone suggested she try to import the document into her word processor.
 - (a) How does importing differ from just opening the document as normal? (2)
 - (b) Another option to get around the compatibility problem would be to ask the department to save the document in the version of the word processor that the teacher uses and resend it to her. What would the department have to do to get this document in the same version as the one used by the teacher? (2)
4. A friend who takes Information Technology said that just about all software has bugs in it. Briefly explain what a software bug is. (2)
5. Give two reasons why people would want to update their software. (2)
6. Your operating system lets you know it wants to update to apply a security patch. What is a 'patch' in this context? (2)
7. Google Docs is an example of online software
 - (a) What do we mean by *online software*? (2)

- (b) Give two potential disadvantages of using online software (2)
- (c) Give two advantages of using online software such as Google Docs (2)
- 8. Give four common software features that most modern operating systems have built into them to make it easier for people with physical disabilities to use computers. (4)
- 9. If your computer doesn't meet the minimum requirements, how could that affect the running of the program? (2)
- 10. The amount of memory, the speed of the CPU and the free hard drive space are generally, the most important hardware requirements. Mention two other hardware requirements, or considerations, that are generally important to a computer gamer. (2)
- 11. A software requirement for a program says, 'Windows 7 or higher'. What does this mean? (2)
- 12. Give two reasons why one would use the 'Open with' option as opposed to double-clicking on the file? (2)
- 13. Suppose that you're working on a read-only document. What could you do in order to be able to edit and save it? (2)
- 14. Briefly describe two scenarios in which you would want to store a file as a different type. (2)
- 15. You recently downloaded a file from *YouTube* but now you cannot find it. List two of the search options you could use to try to locate this file. (2)
- 16. You can find out where a photo was taken by looking at the *metadata* of the file. Explain what this means. (2)
- 17. List two precautions that can help prevent hardware failure. (2)
- 18. Incorrect or invalid data causes computer systems to produce output that is incorrect and of no use. Give two other consequences that unreliable or incorrect output can hold for a business. (2)
- 19. Social engineering techniques can cause the most sophisticated security systems to be completely useless. Explain what this statement means by explaining what social engineering refers to. (2)
- 20. Give two examples of how emails can be used in social engineering. (2)
- 21. Briefly explain how malware can have implications on the productivity of a company. (2)
- 22. Discuss two limitations of using fixed internet access such as ADSL or fibre. (2)
- 23. What are the two most important factors that influence the cost of a specific internet access package? (2)
- 24. If you were travelling overseas, you could make use of a *hotspot* to communicate with family and friends at home. Explain how you would go about this by referring to the function of a hotspot. (2)
- 25. Discuss two advantages and two potential disadvantages of using a social networking site. (4)
- 26. What is Skype and what is it used for? (2)
- 27. Briefly explain what firewall software is. (2)
- 28. Briefly discuss the term 'mobile offices'. (2)

WEBDESIGN (HTML)

QUESTION 1

A website was created to display the road to Tokyo Olympics for the SA Gymnasts.

Open the incomplete 'Olympics 2021' web page in a web browser and also in a text/HTML editor. You may NOT use a word processing program such as Word to answer the HTML question.

Road to Tokyo Olympics

South African gymnast Caitlin Rooskrantz has qualified for the Tokyo 2020 Olympic Games at the recent 2019 Artistic World Championships in Stuttgart. Rooskrantz will be the first South African woman to qualify for the Games in artistic gymnastics since the end of isolation. Rooskrantz, Naveen Daries and Mammule Rankoe flew the flag at the Olympic qualification competition in Stuttgart. The Johannesburg-based gymnast scored 49.466 finishing narrowly ahead of Naveen (49.399) who performed cleanly on all apparatus. Caitlin finished ahead of gymnasts from Sweden, Chile, Israel, Norway, Azerbaijan and Olympic medalist Oksana Chusovitina of Uzbekistan. Only one gymnast per country is allowed to qualify at these championships which meant Naveen would get a shot at the 2020 African Championships that will be hosted in Pretoria in April.

Caitlin Rooskrantz

Caitlin Rooskrantz, 17, of Johannesburg, made history in Hungary. Photo: Supplied. Rooskrantz, a Grade-12 learner from Parktown Girls' High in Johannesburg made history in September becoming the first South African to win a gold medal at an international gymnastics competition. She finished first in the uneven bars at the FIG Challenge Cup in Szombathely, Hungary. SA Gymnastics Federation acting president Donovan Jurgens, commented that the three women's performances were the best South Africa had seen in years. "It is the first time a South African Artistic Woman has qualified at the World Championships for the Olympics without utilizing the African Continental birth," Jurgens said. "And to have two gymnasts' neck on neck in this race is even more encouraging. Should Naveen qualify at the African Championships, this will be the first time in South African Gymnastics history that two gymnasts from the same discipline have qualified for an Olympic Games."

Naveen Daries

Visually impaired Naveen Daries beats Covid-19 odds to realise Olympic dream. CAPE TOWN - Naveen Daries has helped South Africa make gymnastics history after she qualified for the Tokyo Olympics by claiming a bronze medal at the 2021 African Championships, in Cairo, Egypt, last May. By that time, 19-year-old Caitlin Rooskrantz, her fellow South African artistic gymnast, had already qualified for Tokyo. However, when Daries qualified, it became a historic feat for SA gymnastics because it was the first time Mzansi would have two females at the Games. Previously South Africa rarely had females at the Olympics. The pioneers were:

1. Antoinette Kuiters (1960, Rome) and
2. Zandré Labuschagne (2004, Athens)

Now 17 years later, South Africa will have two. The extraordinary feat about Daries' qualification competition," Daries recalled. "It was the first time competing at such a big competition where I made so many mistakes. I am not one to blame or make excuses, but I can admit that it was tough being back in competition after more than a year of no international competition. Gymnastics is a tough sport. We train many, many hours so that we do not fall and make mistakes. In the end, I am human. I had a bad day. I was relieved that it worked out that I still qualified." Daries' coaches then designed a training regime to help her peak when the gymnastics get under way in Japan tomorrow. "My coaches and I are on a programme that we believe will give me the best chance to be at my best in Tokyo," she said. "After the African Championships, I stayed behind in Egypt for the Cairo World Cup a week later. There I qualified for four finals while competing against other Olympic qualifiers from around Europe. It proved I could compete with the best, and this allows me to go to Tokyo with confidence and great pride to represent South Africa."

For further reading click below:

- [Artistic Gymnastics Tokyo 2020](#)
- [First Artistic Gymnast to fly Tokyo 2020](#)
- [Youth Olympics introduce Caitlin Rooskrantz](#)





1.1	Format the heading ' Road to Tokyo Olympics ' as follows: • Change the font type to Tahoma. • Change the font size to 24 pt. • Change the font colour to Green.	(3)
1.2	Insert horizontal line above and under the heading ' Road to Tokyo Olympics ' as shown in the example. • The top horizontal line must be red and the one below yellow. • The lines must be 3pt thick • Width must be 75%	(5)
1.3	The text 'Caitlin Rooskrantz' and 'Naveen Daries' appears above the 2 nd and 3 rd paragraphs. Make the following changes to the headings: • Apply a Heading 2 style to the text you added. • The text must appear in a blue font colour. • The font size of the text must be set to 14.	(4)
1.4	Three images are included in the page. Insert the proper tags in order for the images to display as per the example. • All the pictures must align to the right • Width is 320 and height is 200 for first two pictures • Width is 300 and height is 120 for the SA flag. • Add an attribute to the first two images to display the text below if the images cannot display: ○ Caitlin Rooskrantz (<i>for first picture</i>) ○ Naveen Daries (<i>for the second picture</i>)	(12)
1.5	Find the text "The Pioneers were..." in the third paragraph and create a numbered list of the two pioneers.	(3)
1.6	Find the text ' For further reading click below: ' at the end of the document and make the following changes. • Create a bulleted list of the 3 items • Show square bullets under the heading	(4)
1.7	Attempt were made to create hyperlinks to 3 YouTube videos. Use the following text to will appear in the webpage to link to the given URL's in the data file: ▪ Artistic Gymnastics Tokyo 2020 ▪ First Artistic Gymnast to for Tokyo 2020 ▪ Youth Olympians introduce Caitlin Rooskrantz	(5)
TOTAL		[36]

DATABASE

Written Activity

QUESTION 2A

1. Explain the difference between *Design View* and *Datasheet View* of a table. (2)
2. Why are reports useful tasks a database can do? (2)
3. Which delimiter should you use in a *.csv file to make importing easier? (1)
4. Which view do you use to apply custom formatting to a database? (1)
5. Which other applications can you integrate Access with? (4)
6. List two things you can do to troubleshoot errors in Access databases. (2)
7. Describe the three ways you can access the Help pane in Access (3)
8. State TWO common problems when importing data from a CSV file into a database. (May 2017) (2)

TOTAL [17]

Practical Activity

QUESTION 2B

A database contains a list of all the Olympic women Gymnasts with their detail.
Open now the **Olympic Gymnastics** database.

- 2.1 Open the **Athlete Info** table.
 - 2.1.1 Change the field properties of the *Country* field to an appropriate field size. (1)
 - 2.1.2 Create an input mask for the *DOB* field to accept dates in the format dd-MMM-yyyy.
EXAMPLE: 01-JAN-2001 or 31/DEC/2010 (5)
 - 2.1.3 Insert a new field called **Identikit** to the table.
 - The field should appear just after the Gender field.
 - Set the datatype so that you can be able to add an image of the gymnast to the field (3)
 - 2.1.4 Change the field property of the Gender field so that you can choose from a list a 'F' for Female or a 'M' for male. (2)
- Save and close the **Athlete Info** Table.
- 2.2 Open the **Results** table.
 - 2.2.1 Create a query based on the **Results** table that will reflect the following criteria.
 - The fields to show is the *Rank, Name, Code and Total Score*.
 - The list must be in ascending order according to the Rank
 - Only the gymnasts that qualify (Q) for the final must show
 - Name the query, **QualifyFinal**. (4)
- 2.3 A Report Results was created. Open the report and make the following changes
 - 2.3.1
 - Group the report according to the Code field
 - Sort the data according to the Name field
 - Change the font colour of the Report heading to Green with a yellow background. (4)
 - 2.3.2 Insert a function in the Report footer to determine the total number of gymnasts that qualify for the final.
 - Add a suitable label for the function. (3)

TOTAL [22]

WORD PROCESSING

QUESTION 3

Open the **Event Final** word processing document about the artistic gymnastic finals and make the following changes below

- 3.1 Find the text 'Skinner, Lee medal on first night ... games' and apply the following **text effect**:
- Set a red text outline.
 - Set the width of the text outline to 1.5 pt.
 - Font size of 20pt
 - Centre the heading (4)
- 3.2.1 Insert the image, Skinner.jpeg into the document next to the bulleted list:
- Picture must be aligned to the right
 - Size must be width 8,58cm and height 5,3cm.
 - Format the picture style to a Soft Edge Rectangle (5)
- 3.2.2 Add a caption to the image that reads '*Picture provided by John Cheng on Olympics Webpage*'. (2)
- 3.3 Format the three paragraph headings to appear as a Heading 1 style. (2)
- 3.4 Insert a citation just after the first paragraph under the heading MyKayla Skinner. The data to be used is:
- Webpage = MyKayla Skinner,
 - Website and Author is US Gymnastics
 - Last updated 01 June 2021
 - URL is: <https://usagym.org/pages/athletes/athleteListDetail.html?id=143382> (3)
- 3.5 Insert an automatic bibliography on the last page.
- Number the items in bibliography with number format: i, ii. Etc. (2)
- Invitations to the final of the Artistic Gymnastics must go to all the gymnasts that qualify.
- Complete a mail merge as follows:
- Use the Results table in the **Olympic Gymnastics** database as a data source for the **Invitation** mail merge document.
 - Edit the data source recipient list to include ONLY the data of those athletes that qualifies for the finals.
 - Replace the text '<<Name>>' with the merge field *Name*.
 - Replace the text '<<Code>>' with the merge field *Surname*.
 - Replace the text '<<Total Score>>' with the merge field *Total Score*
- Save the document, but do NOT close it. (6)
- Complete the merge and save the merged document as **InvitationMerge** Save and close the **Invitation** document and the **InvitationMerge** document (1)
- TOTAL [25]**

SPREADSHEETS

QUESTION 4

Open the *Travel* spreadsheet. Work in the *Travellers* worksheet.

The worksheet shows the statistics of the arrival and departures of travellers using the King Shaka airport from 2010 to 2014.

- 4.1. Format the cells in row 1 as follows:
 - a. Merge the text in row 1 from cells A1:I1. (1)
 - b. Change the row height of row 1 to 57. (1)
 - c. Change the size of the heading in row 1 to 22 pt. (1)
 - 4.2. Adjust the column width of rows 2 & 3 so that all the subheadings are clearly visible. (1)
 - 4.3. Column C has the arrival months of the travellers. Use AutoFill to continue the arrival months. (1)
 - 4.4. Apply conditional formatting to column D so that all the cells displaying more than 4000 SA arrivals:
 - a. Appear in a light blue fill. (3)
 - b. Have a red border.
 - 4.5. In cell D54 calculate the number of SA residents that arrived at the Airport. (2)
 - 4.6. In cell L4 determine the second largest number of foreign travellers that have departed from the airport. (2)
 - 4.7. In cell L5 determine the least number of SA residents that have departed from the airport. (2)
 - 4.8. Use a function in cell L6 to determine how many visitors overnighted in May. (2)
- Work on the *Foreign* worksheet. The spreadsheet contains the number of nights spent in each province by foreign tourists.
- 4.9. Change only the vertical borders between the headings in row 2 to a reddish line. (2)
 - 4.10. Insert a function in cell L3 to display the average number of ALL Malawian visitors to South Africa. (3)
 - 4.11. Insert a function in cell L4 to show how many provinces did not receive Mozambican visitors who came by air. (2)
 - 4.12. Use conditional formatting to automatically display from which 8 countries the most travellers to KwaZulu Natal came. Fill the background of these cells with any background colour of your choice. (3)
 - 4.13. Use a function in cell B50 to calculate all the foreign tourists who visited Gauteng. (2)
 - 4.14. Insert a function in cell L5 that will display how many countries had people visiting North West. (2)

Total: [30]

QUESTION 5

Ace Travel has stored a list of their clients in a spreadsheet.

Open the *Ace Travel* spreadsheet and work in the *Clients_Kliënte* worksheet.

- 5.1. Format the worksheet as follows:
 - a. Centre the text in row 1. (1)
 - b. Use a light blue fill colour for row 1. (1)
 - c. Change the height of row 1 to 30pt. (1)
 - d. Wrap the contents of cell A3. (1)

- 5.2. Use conditional formatting on column E to automatically highlight all males in a yellow fill colour and red text colour. (3)
- 5.3. Insert a function in cell K8 to determine the total number of trips made by clients. (2)
- 5.4. Insert a function in cell K9 to determine how many clients are NOT international travellers. (3)
- 5.5. Create a pie chart to display the percentage breakdown of each category of traveller status. Use the data in cells J11:K13 to create the chart as follows: (8)
 - Add the following chart title above the chart (bold & 14pt): *Traveller Status*
 - Display the percentage for each category of traveller status.
 - Fill the category that has the highest percentage with any gradient colour of your choice.
 - Display the chart in a new worksheet and rename it to: Travellers

Work in the Bookings_Besprekings worksheet.

- 5.6. The rate per day is stored in column H. (2)
Insert a formula in cell D5 to determine the total accommodation cost for the duration of the stay for Bertha Hood.
- 5.7. Insert a function in cell J7 to determine the third lowest rate per day. (2)
- 5.8. Insert a function in cell J10 to determine the total number of days (column C) that clients will spend at hotels or lodges in Kenya. (4)
- 5.9. A booking reference in column A that is indicated with an 'X' indicates an international hotel or lodge. A booking reference that is indicated with a 'D' indicates a domestic hotel or lodge. Insert a function in cell E10 to return the value 'TRUE' if the hotel or lodge in row 10 is international and the value 'FALSE' if the hotel or lodge in row 10 is domestic. (4)

Total: [32]

QUESTION 5

Open the *Donors* spreadsheet. The details of the blood donors at the school are stored in this spreadsheet. Work in the DonorsInfo worksheet.

- 6.1. Format the headings in A1:G1 with a red fill and the font colour to be white. (2)
- 6.2. Change the format of the heading in cell I2 to resemble the image below: (2)
- 6.3. Change the font of rows 1 & 2 to Comic Sans MS. (1)
- 6.4. Apply a suitable formatting in column H so that all cells with donors who weights below 60KG are displayed with a light blue fill. (3)
- 6.5. Use a suitable formatting in row 1 and 2 to lock the headings so that they are kept visible when you scroll through the rest of the worksheet. (2)
- 6.6. Learners that donate more than 30 litres of blood are seen as "Peer Promoters" and those less than 30 litres seen as "Beginners". The words "Peer Promoter" and "Beginner" should appear in column F based on the litres of blood donated in column I. In cell F26, use a function to determine category for Liyema Frans. (3)

Work in the Save-a-ton worksheet.

- 6.7. General statistics are normally needed of the learners that are taking part in the Save-a-Ton.
 - a. In cell I5, use a function to calculate the number of girls that took part. (2)
 - b. In cell I6 insert a function to determine the number of male adults. (2)

- 6.8. Use the totals for the Male and Female in J1:K2 to create a graph similar to the one below. NOTE: (8)
- The graph must be a column chart.
 - Display a centred overlay chart title: "We support Blood Donation".
 - Format the column for female to a stack filled with a picture Droplets.jpg.
 - The vertical axis must have a rotated title that reads "Number of Adults".
 - Legend must be displayed on the left side.
 - Data labels must be displayed inside base.
- 6.9. Move the chart/graph to a new worksheet within the existing spreadsheet. Rename the new sheet "Chart". (2)
- Work in the Import worksheet.
- 6.10. Import the data from the Import.txt file into the Import worksheet. (3)
- Total: [30]**

ANSWERS AND SOLUTIONS:

Theory

Short questions

Match columns	
1.	E
2.	I
3.	L
4.	R
5.	B
6.	C
7.	N
8.	D
9.	F
10.	H
11.	J
12.	AUP
13.	S
14.	M
15.	T

Multiple choice	
1.	B
2.	A/B
3.	A/B
4.	D
5.	C
6.	A
7.	B
8.	D
9.	D
10.	D
11.	C
12.	D
13.	B
14.	B
15.	A/B

True/false items

1. **F – Conditional formatting**
2. **F – Bot**
3. **T**
4. **T**
5. **T**
6. **T**
7. **F – Internet of Things (IoT)**
8. **F - Trialware**

Content based questions:

1	Multimedia content is content that combines text, sound, images, drawings, animations and movies to communicate ideas and concepts to a user. ✓✓	2
2	It means that the files from the one program cannot be opened or read by the other program. ✓✓	2
3(a)	The import function of the program would need to be used to change the format (encoding) of the document into a format that is compatible with the word processor. ✓✓	2
3(b)	They would have to export it by using the Save As function to save the document in the format that the teacher's software can use. ✓✓	2
4	A (software) bug is a term used to describe an error or fault in the program caused by the way it was written or programmed. ✓✓	2

5	To get the latest 'fixes' for the bugs in the current version of the software and to obtain new, additional features. ✓✓	2
6	A patch is software designed to fix an error or bug in existing software (the operating system in this case) by updating a program or part of it. ✓✓	2
7 (a)	This refers to a scenario where software actually runs on servers on the internet. You see the interface of the software in your web browser and use the software as if it is running on your computer. ✓✓	2
7 (b)	Any two ✓✓ • If you do not have an internet connection, you are unable to access the software or your data. • You no longer have control over security of your data or the backup policy if the files created with the software are also saved online. • You may have to 'rent' the software. • The software might not have all the features or abilities of locally installed software. • It might run much slower, depending on the speed of your internet connection.	2
7 (c)	Any two ✓✓ • The software is always up to date. • You don't have to download or install anything. • It does not take up space on your local storage. • You can use the software and access your data from any computer anywhere in the world as long as you have an internet connection.	2
8	Screen magnification Text to speech (Narration) Larger mouse cursor Higher contrast settings Speech recognition for voice control of the computer	4
9	The program might not work, or it might work really slowly. ✓✓	2
10	Any two of: ✓✓ • A minimum screen resolution • Specialised hardware such as a high-end graphics card or a joystick or game controller • A larger screen size • A fast refresh rate etc.	2
11	It means that the program must have Windows 7 or any later version installed, e.g. Windows 8 or Windows 10. ✓✓	2
12	To use an application other than the one assigned/designated to open that type of file, or if there is no default application available to open the file (no application assigned with that type of file). ✓✓	2
13	Remove the Read-only attribute or save it under a new name (or in a different location). ✓✓	2
14	Any two of: ✓✓ • You want to send the file to someone using an older version of the package. • You want to allow users who are using a different operating system to access the data. • You want different programs to be able to read the data.	2

15	Any two of: ✓✓ • The name (or partial name) of the file • The file type (file extension) as it is a video file – e.g. MP4 • The date it was saved (as it was recently downloaded), or you could specify a date range • The size of the file as video files are often quite large	2
16	Metadata is 'extra information' about a file. The easiest way to see what extra information is stored in a file is to right-click on it using a program like Windows/File Explorer and choose Properties from the menu that pops up. Properties can contain extra information such as the GPS coordinates of where a photo was taken. ✓✓	2
17	Any two of: ✓✓ Use a UPS, prevent water damage, ensure proper cooling, keep in safe places to prevent being knocked over, use the correct consumables (ink/toner cartridges), be 'firm but gentle' when connecting components, etc.	2
18	Any two consequences: ✓✓ • A breakdown in user trust • A decrease in efficiency • Reduced morale or motivation • An increased workload • Incorrect or delayed decision-making • Decreased product quality, etc.	2
19	Social engineering refers to the use of deception to manipulate or 'con' someone into giving out confidential information (such as a password or account number) or into giving access to their computer or premises. ✓✓	2
20	Two examples: ✓✓ • Emails telling you that you have won a competition (that you never entered) • Emails offering a job or investment opportunity • Emails telling you of a tax refund or an inheritance due to you • Phishing emails asking you to confirm your banking details etc.	2
21	Any suitable explanation. ✓✓ Until recently, the most obvious financial cost related to malware has been the cost of purchasing software to prevent infection, especially for large organisations and companies which have to protect hundreds or even thousands of computers. They must often pay for the services of experts to help them in the battle against malware. Ransomware has introduced a direct financial cost to being infected with malware. Your data gets encrypted and you can only access that data if you pay a ransom fee. When computers are infected with malware, an enormous amount of time must be spent in removing the infection and fixing the problem. All this time could rather have been spent on more productive work.	2
22	Any two of: ✓✓ • Lack of portability • Can be expensive (depending on the package chosen) • ADSL or fibre may not be available in your area	2

23	The amount of bandwidth ('speed') of the connections ✓ The size of the cap selected in the package✓	2
24	A hotspot is an area in which access to a wireless network can be established using WiFi technology using mobile computers and other mobile devices with built-in wireless capabilities. This network you connect to wirelessly is then normally connected to the internet via a fixed line. Hotspots are found in locations such as airports, restaurants, coffee shops, libraries, convention centres, shopping malls and hotels. ✓✓	2
25	Any two advantages of social networking sites: ✓✓ • An easy and cost-effective method to stay in touch and communicate with friends and family all over the world. • Allows you to send and receive messages, update your 'status 'and upload photos and videos. • Allows collaboration and interaction to take place. • Allows people who would normally not meet to interact and form communities. • You are not bound by any geographical and cultural differences. • Can be used as a tool to market a business, service, product, or website. Any two potential disadvantages of social networking sites: ✓✓ • Increased risk of identity theft, fraud, cyber-stalking and harassment. • Many people have false information on their profiles and are not always who they say they are. • Increased risk of loss in productivity if employees spend too much time online. • Social networks may increase the quantity of communication at the expense of the quality.	4
26	Skype is (application) software that allows one to make a phone/video call using an internet connection. ✓✓	2
27	Firewall software is software that allows you to control which programs can access the internet and protects your computer or network from unauthorised access by other computers outside your network/on the internet. ✓✓	2
28	If you have a laptop or tablet and a smartphone, as well as internet access, then you have an office! The cell phone means you are reachable anywhere. The laptop contains all the software and documents you need. You work wherever you are. ✓✓	2

Practical

Question 4

	Criteria	Marks
4.1.	Row 1: Text merge ✓ Height 57 ✓ Size of heading 22 pt ✓	1 1 1
4.2.	Rows 2 and 3: Column width adjusted ✓	1
4.3.	Column C: AutoFill used ✓	1
4.4.	Conditional formatting applied ✓ Light blue fill ✓ Red border✓	1 1 1
4.5.	Cell D54: =SUM(D4:D53) =SUM✓ (D4:D53) ✓	2

4.6.	Cell L4: =LARGE(G4:G54;2) =LARGE ✓ (G4:G54;2) ✓	2
4.7.	Cell L5: =MIN(E4:E54) =MIN ✓ (E4:E54) ✓	2
4.8.	Cell L6: =COUNTIF(C4:C53;C8) =COUNTIF ✓ (C4:C53;C8) ✓	2
4.9.	Row 2: Vertical borders ✓ Red line ✓	1 1
4.10.	Cell L3: =AVERAGE(B6:J6;B15:J15) =AVERAGE ✓ (B6:J6; ✓ B15:J15) ✓	3
4.11.	Cell L4: =COUNTBLANK ✓ (B16:J16) ✓	2
4.12.	Conditional formatting applied ✓ Top 5 =\$E\$4:\$E\$11 ✓ Background fill ✓	3
4.13.	Cell B50: =SUM ✓ (B4:B49) ✓	2
4.14.	Cell L5: =COUNTA(H4:H49) =COUNTA ✓ (H4:H49) ✓	2

Question 5

	Criteria	Marks
5.1.a	Row 1: Text in row 1 text is centred ✓	1
.	Row 1: Light blue fill colour ✓	1
b.	Row 1: Row height 30 pt ✓	1
c.	Cell A3: Contents of cell A3 wrapped ✓	1
d.		
5.2.	Conditional formatting in Column E: • Conditional formatting has been applied to Column E ✓ • yellow fill and red text colour ✓ • All males ✓	1 1 1
5.3.	Cell K8: =SUM ✓ (F4:F53) ✓	2
5.4.	Cell K9: =COUNTIF(G4:G53;FALSE) COUNTIF ✓ G4:G53 ✓ FALSE ✓	3
5.5.	Graph • Pie chart/graph inserted ✓ • Correct data series selected: =Clients!J11:K13 ✓ • Chart title inserted "Traveller Status" ✓ bold and 14 pt ✓ ✓ • Correct percentages displayed for each category ✓ • Category (Adults/Volwassenes) with the highest percentage filled with gradient colour ✓ • The chart appears in the sheet named 'Travellers' ✓	1 1 3 1 1 1
5.6.	Cell D5: =H5* ✓ C5 ✓	2
5.7.	Cell J7: =SMALL ✓ (H4:H30;3) ✓	2

5.8.	Cell J10: =SUMIF(G4:G30;"Kenya";C4:C30) SUMIF ✓ G4:G30 ✓ "Kenya" ✓ C4:C30 ✓	1 1 1 1
5.9.	Cell E10: =IF(A10="X";TRUE;FALSE) IF ✓ A10="X" ✓ TRUE ✓ FALSE ✓	1 1 1 1

Question 6

	Criteria	Marks
6.1.	Row 1 A1:G red fill and font colour white ✓ ✓	2
6.2.	Cell I2 Wrap text ✓ ✓	2
6.3.	Rows 1 and 2 Comic Sans MS ✓	1
6.4.	Conditional Formatting: Conditional formatting rule applied ✓ Cell value "<60KG" ✓ Light blue fill ✓	1 1 1
6.5.	Rows 1 and 2 Freeze panes ✓ ✓	2
6.6.	Cell F26 =IF(I3:I41>30;"Peer Promoters "; "Beginner") =IF ✓ I3:I41>30 ✓ "Peer Promoters "; "Beginner" ✓	1 1 1
6.7.	I5 =COUNTIF(C4:C52;"Female")	2
a.	=COUNTIF ✓ C4:C52;"Female" ✓	
	I6 =COUNTIF(C4:C53;"Male")	
b.	=COUNTIF ✓ C4:C53;"Male" ✓	2
6.8.	Chart/Graph Column chart created ✓ Chart title, "We support Blood Donation" ✓ Female column: stack filled with picture Droplets.jpg ✓ ✓ Vertical axis: "Number of Adults", rotated title ✓ ✓ Legend on left side ✓ Data labels inside base ✓	1 1 2 2 2
6.9.	Move chart to its own sheet ✓ Rename sheet, "Chart" ✓	2
6.10.	Import worksheet: Import data from the Import.txt file ✓ ✓ ✓	3