higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

(GS)N220**(E)**(N8)H
NOVEMBER EXAMINATION

NATIONAL CERTIFICATE

COMPUTER PRACTICE N6

(6030196)

8 November 2016 (Y-Paper)
09:00–12:00

THE QUESTION PAPER INCLUDES THE INSTRUCTIONS TO CANDIDATES AND INVIGILATORS AND MUST BE HANDED TO CANDIDATES 30 MINUTES BEFORE THE COMMENCEMENT OF THE EXAMINATION SESSION.

This question paper consists of 31 pages and 4 answer sheets.

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DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE
COMPUTER PRACTICE N6
TIME: 3 HOURS
MARKS: 200

INSTRUCTIONS TO INVIGILATORS AND CANDIDATES

READ THE FOLLOWING INSTRUCTIONS CAREFULLY BEFORE ANSWERING THE QUESTION PAPER. INVIGILATORS WILL EXPLAIN IF NECESSARY.

1. The question paper comprises THREE sections:

   SECTION A: Theory (50 marks)
   SECTION B: Word processing (150 marks)
   SECTION C: Spreadsheet (150 marks)

   SECTION A is COMPULSORY and must be answered by all the candidates.

   Candidates must answer either SECTION B or SECTION C.

   SECTION A must be answered on the ANSWER SHEETS.

   SECTION B is done on the computer with the aid of a word processing program.

   SECTION C is done on the computer with the aid of a spreadsheet program.

   ALL the printouts must be correctly numbered and both the EXAMINATION NUMBER and QUESTION NUMBER must be printed as instructed. EXAMINATION NUMBERS in writing are NOT acceptable. The printouts must be placed in the EXAMINATION FOLDER in the correct sequence.

2. The time allocated for the question paper is THREE hours. NO additional time will be allowed for the printing of answers after the completion of the examination.

3. In the event of a power failure or a computer or printer breakdown the invigilator must make the necessary arrangements for the candidate to continue and the actual time lost must be added.

4. If there is a problem with the printer, e.g. it does not print ê, send a report with the ANSWER SHEETS of the centre.

5. A candidate may have a list of ASCII codes with him/her and spell check may be used.

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6. Each answer must be printed on a separate sheet of paper and on ONE side of the paper only. Printouts must be placed in the EXAMINATION FOLDER immediately.

7. At the conclusion of the examination session ALL printouts to be marked must be placed in the correct sequence in the EXAMINATION FOLDER and handed to the invigilator. Only one printout per question or subsection of a question may be handed in for marking. Printouts NOT submitted for marking must be collected at the end of the session by the invigilator and must be destroyed at the end of the day. NO printouts whatsoever may be removed from the examination room or put in waste-paper bins.

8. Printouts must be printed on A4 paper, unless a specific paper size is required in a question.

9. In SECTIONS B and C of the question paper only a 10 cpi/12 point letter size may be used, unless a question requires a specific size, or in the case of a spreadsheet, where a smaller letter size is required to fit the answer on ONE page. In SECTION B margins of 1"/2.54 cm should be used unless otherwise instructed.

10. Candidates must remember that ALL work on the computer should be saved at regular intervals to prevent loss of work in the event of a power failure. NO additional time may be allowed for such loss of work. It is the candidates' responsibility to protect their answers against deletion.

11. In order to print the original as well as the edited attempts of the answers candidates are reminded to save the work after each separate question before it is printed.

12. At the end of the examination session each candidate must hand in the printouts of the answers as well as a disk with the saved answers (properly marked with the candidate's EXAMINATION NUMBER). If the candidate's work is saved on a hard drive/network, the invigilator(s) must copy the work to a compact disk/memory stick and the answers must immediately be deleted from the hard drive/network. This disk/memory stick/compact disk must be handed to the examination section for safekeeping for at least SIX months in case enquiries should be made by the examiner/moderator and subject specialists of education. The disk must NOT be included for marking.

13. NO question paper may be taken out of the examination room until at least ONE hour after the commencement of the last session. All papers must consequently be handed in. These may be returned to candidates on completion of the examination.

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14. In the event of a question paper being written in more than ONE session invigilators must ensure that ALL answers of candidates are removed from the hard disk or network before candidates for the next session are allowed into the room.

15. NO candidate may print his/her work for another candidate, make his/her disk/memory stick available to another candidate or access other candidate's work on the network. Any attempt to access information from or transfer information to another candidate in whatever manner is a contravention of the examination rules and regulations and will be viewed in a serious light.

WAIT FOR THE INSTRUCTION FROM THE

INVIGILATOR BEFORE YOU TURN THE PAGE.

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SECTION A: THEORY (COMPULSORY) 50 MARKS

THIS SECTION MUST BE ANSWERED ON THE ANSWER SHEETS PROVIDED. REMEMBER TO WRITE YOUR EXAMINATION NUMBER ON THE ANSWER SHEET AND TO PLACE THE COMPLETED ANSWER SHEETS IN YOUR EXAMINATION FOLDER.

QUESTION 1 (INFORMATION SYSTEMS)

1.1 Name SIX advantages of leasing when financing a new computer. (6)

1.2 Name FOUR types of networks. Do NOT use acronyms but write the names in full. (4)

1.3 Name the FIVE components of a data communication system. (5)
[15]

QUESTION 2 (OPERATING SYSTEMS)

Indicate whether the following statements are TRUE of FALSE. Write only 'true' or 'false' next to the question number (2.1–2.10) on the attached ANSWER SHEET.

2.1 Backup is a system tool used to save data and in so doing to protect it from accidental loss.

2.2 System information is a system tool that will display the current system information.

2.3 Disk cleanup is a system tool used to clean a disk of unnecessary files.

2.4 The scandisk command is used to check for any errors on the disk.

2.5 The attributes command is used to either look at the attribute of a file (e.g. read-only) or to change the attributes.

2.6 The desktop gadgets option on the control panel is used to adjust the date and time.

2.7 The devices and printers option on the control panel is used to adjust the mouse settings.

2.8 The power option on the control panel is used to adjust the sleep options of the screen and system.

2.9 The program and features option on the control panel is used to uninstall software.

2.10 The display option on the control panel is used to install the watch on the desktop.

(10 x 1) **[10]**

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QUESTION 3 (VIRUSES)

Choose a system tool or a command in COLUMN B that matches a description in COLUMN A. Write only the letter (A–O) next to the question number (3.1–3.15) on the attached ANSWER SHEET.

COLUMN A		COLUMN B	
3.1	Boot sector viruses	A	Norton antivirus and McAfee
3.2	Propagation stage of virus infection	B	system becomes slow
3.3	Chain e-mail virus warning	C	Saturday the 14th
3.4	Active stage of virus infection	D	Durban, Jerusalem
3.5	Dormancy stage of virus infection	E	Trojan Horse
3.6	A card inserted on the motherboard that intercepts viruses	F	Worm
3.7	Disinfecting stage of virus infection	G	Stoned, Michelangelo
3.8	Examples of antivirus hardware	H	mainframe computers
3.9	Examples of virus hoax	I	when a virus is active
3.10	Antivirus software	J	when a virus waits (is inactive)
3.11	Symptom of virus infection	K	ISP-Planet equipment
3.12	Logical Bomb virus	L	Antivirus hardware
3.13	Virus designed to limit illegal copying	M	AIDS and Antichrist
3.14	A virus that gradually takes more space	N	Virus Hoax
3.15	File viruses	O	when a virus is removed
		P	Transmission stage
		Q	Hibernation period
		R	Apple computers
		S	WAN and LAN

[15]

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QUESTION 4 (TROUBLESHOOTING)

Explain the following errors or error messages and give the steps to correct it:

4.1 Insufficient disk space

4.2 Cordless mouse does not respond

4.3 Data error reading drive E (CD-Rom drive)

4.4 Document failed to print

4.5 Plug into another power source

(5 x 2) **[10]**

TOTAL SECTION A: 50

SECTION B: WORD PROCESSING 150 MARKS

CANDIDATES MUST ANSWER EITHER SECTION B OR SECTION C.

INSTRUCTIONS

1. Read the instructions for each question carefully before you answer the questions.

2. Use a 10 cpi/12 pt letter type, for example COURIER NEW 12 (WORD)/COURIER 10 cpi (WORD PERFECT), except when receiving other instructions.

3. The following information must appear on each page as a HEADER:

QUESTION NUMBER	EXAMINATION NUMBER
Align the QUESTION NUMBER against the left-hand margin.	Align the EXAMINATION NUMBER and COMPUTER NUMBER against the right-hand margin.

4. Use the date function to insert all dates.

5. Put ALL printouts in your EXAMINATION FOLDER.

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QUESTION 5

1. Retrieve the file MALWARE as given on the next pages.

2. Edit the document as indicated in the instructions and according to the manuscript/proofreading signs.

3. Use Times New Roman 12 pt/10 cpi.

4. Margins must be 0.5"/1.27 cm.

5. Insert the QUESTION NUMBER, your EXAMINATION NUMBER and COMPUTER NUMBER as indicated in the instructions.

6. Replace the word viruses with MALWARE in capital letters, bold, italics and 14 pt.

7. Change the main heading, Interesting virus facts, to capital letters, underlined, bold, italics, centred and 18 pt.

8. Left-align all the level 1 paragraph headings and change to capital letters and bold.

9. Make use of the automatic paragraph numbering function to number the paragraphs as indicated.

   * indicates main paragraphs (level 1), ** indicates subparagraphs (level 2), etc.

   Use the paragraph numbering style 1., 1.1., 1.1.1., 1.1.1.1.

   Note: Level 1 (1–4) must also be in bold.

10. Insert page breaks as follows:

    Before Vulnerability of different operating systems to viruses
    Before The following is a history of some of the most famous viruses ever:
    Before Top computer virus symptoms - Checklist
    Before Missing files - Gone with the wind
    Before Unusual error messages – Did you see that?

11. Change the line spacing of the page, Vulnerability of different operating systems to viruses, to double line spacing.

12. Sort the subparagraphs of the page, The following is a history of some of the most famous viruses ever:, in ascending order according to the years.

13. Centre the paragraphs of the page Unusual error messages – Did you see that?

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14. Page of Missing files - Gone with the wind:

    14.1 Change the page orientation to landscape.

    14.2 Change the FOUR paragraphs to equal columns with a vertical line between the columns.

15. Save the file as Q5 MALWARE.

16. Print the document and place the printout in your EXAMINATION FOLDER.

Interesting virus facts

*The most common different forms of electronic infections are:

**Viruses:

***A virus is a small piece of software that piggybacks on real programs.

***For example, a virus might attach itself to a program such as a spreadsheet program.

****Each time the spreadsheet program runs, the virus runs too and it has the chance to reproduce or wreak havoc.

**E-mail viruses:

***E-mail viruses travels as attachments to e-mail messages.

***It usually replicates itself by automatically mailing itself to dozens of people in the victim's e-mail address book.

**Trojan horses:

***A Trojan horse is simply a computer program.

***The program claims to do one thing (it may claim to be a game), but instead does damage when you run it (it may erase your hard disk).

**Worms:

***A worm is a small piece of software that uses computer networks and security holes to replicate itself.

***A copy of the worm scans the network for another machine that has a specific security hole.

***It copies itself to the new machine using the security hole and then starts replicating from there as well.

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*Vulnerability of different operating systems to viruses

**The vast majority of viruses target systems running Microsoft Windows. This is due to Microsoft's large market share of desktop users.

**Open-source operating systems such as Linux allow users to choose from a variety of desktop environments, packaging tools, etc. which means that malicious code targeting any one of these systems will only affect a subset of all users.

**Only a few major viruses has hit Macs in the last years.

***The difference in virus vulnerability between Macs and Windows is a chief selling point, one that Apple uses in their Get a Mac advertising.

*The following is a history of some of the most famous viruses ever:

**1971 – The Creeper: A message displayed 'I'm the creeper, catch me if you can!'

**2014 – Backoff: Malware designed to steal credit card data.

**1995 – Concept: Viruses created to attack Microsoft Word documents.

**1990 – Symantec launched the Norton antivirus.

**2000 – ILOVEYOU: Viruses capable of deleting files in JPEG format.

**2001 – Anna Kournikova: This virus was spread by e-mails containing pictures of the very attractive female tennis player, but in fact hid a malicious virus.

**2004 – MyDoom: Developed to share files and permits hackers access to infected computers.

**2007 – Storm Worm: This was fast spreading e-mail virus threats against Microsoft systems that compromised millions of systems.

**2006 – OSX/Leap-A: This was the first ever virus against Mac OS X.

**2008 – Koobface: Viruses targeting Facebook and MySpace users.

**1974 – Wabbit (Rabbit): Developed to make multiple copies of itself reducing the performance of the computer.

**2010 – Kenzero: It is a virus that spreads online.

**2013 – Cryptolocker: This trojan horse encrypts the files infected.

*Top computer virus symptoms – Checklist

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**Hardware troubles – It's alive!

***If sudden sounds of the CD-ROM tray opening completely out if its own will give you the heebie jeebies.

***If your hardware started acting up on its own, without you requesting any action by means of a keyboard or mouse, you are likely having viruses on your computer system.

**No response – Is anyone home?

***We've all been there: Working away and then BAM – nothing happens!

***You can't move your mouse, the keyboard does zilch, you go into panic mode.

**Slow performance – Are we there yet?

**Slow startup – Easy doesn't.

***Another important symptom of computer viruses is slow startup.

***If it takes way too long then it may be a symptom of a viral infection in your computer.

**Crashing – Crash and burn, baby!

***When your computer crashes spontaneously, be careful.

***If it self-restarts frequently, every few minutes – beware of viruses.

**Missing files – Gone with the wind

**Disks or disk drives are not accessible – Who ate my porridge?

**Extra files – Who sat in my chair?

**Printer issues – Is this thing on?

**Unusual error messages – Did you see that?

***This e.g. may include gibberish messages, messages you hadn't seen before, undesired advertisement messages, etc.

****Special attention must be paid to messages that disguise themselves as antivirus warning messages.

****They are designed to trick you into thinking that you are at risk and must take action to protect your computer system.

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QUESTION 6

1. Open a new document.

2. Use Times New Roman 12 pt/10 cpi.

3. Margins must be 0.5"/1.27 cm.

4. Insert the QUESTION NUMBER, your EXAMINATION NUMBER and COMPUTER NUMBER as indicated in the instructions.

5. Insert the following heading in letter size 18, capital letters and centred: Computer viruses are actually just one type of malware: self-replicating programs designed to spread itself from computer to computer. A virus is in fact the earliest known malware invented.

6. Leave TWO lines and key in the text, TABLE OF CONTENTS, in capital letters, bold and left-aligned and PAGE NUMBER in capital letters, bold and right-aligned. Use letter size 18 for these headings. Leave TWO lines and insert a page break.

7. Page 2: Insert the file Q5 MALWARE.

8. Delete ALL the text from the heading TOP COMPUTER VIRUS SYMPTOMS – CHECKLIST.

9. Insert page breaks at the following places:

   Before paragraph 2, before paragraph 3, after paragraph 3.

10. Insert page numbers bottom, centred. Make sure that the content of the file Q5 MALWARE starts with page 4.

11. MANIPULATION OF THE FIRST PAGE:

    11.1 Suppress the display of the page number on this page.

    11.2 Leave TWO lines after the heading TABLE OF CONTENTS.

    11.3 Mark the following headings for the table of contents:

        11.3.1 Paragraph 1: The first paragraph of level 1, 2, 3 and the first line of 4

        11.3.2 Paragraph 2: Level 1 heading and the third paragraph of level 2

        11.3.3 Paragraph 3: Level 1 heading and the first, third and fifth paragraph of level 2

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11.4 Generate the table of contents, using Rockwell 10 pt.

11.5 Page numbers must be right-aligned with leader dots.

12. MANIPULATION OF THE LAST PAGE:

12.1 Key in the text, INDEX, in capital letters, bold and left-aligned and PAGE NUMBER in capital letters, bold and right-aligned. Use letter size 18 for these headings.

12.2 Leave TWO lines after the heading INDEX and generate the index with the following words: MALWARE, virus, Macs, worm, Microsoft, Trojan horse. Page numbers must be right-aligned with leader dots. Use TWO columns.

13. Save the document as Q6 INDEX. PRINT ONLY page one, the TABLE OF CONTENTS, page two and the last page, the INDEX. Place the printouts in your EXAMINATION FOLDER.

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QUESTION 7

Create a letterhead for Norton Antivirus which you will use to advertise an antivirus workshop.

1. Use Comic Sans 12 pt/10 cpi.

2. Margins must be 0.5"/1.27 cm.

3. Insert the QUESTION NUMBER, your EXAMINATION NUMBER and COMPUTER NUMBER as indicated in the instructions.

4. Insert a double horizontal line from the left- to the right-hand margin at the top of the page.

5. Leave TWO lines after the double line and create THREE equal columns. Spaces between the columns: 0.59"/1.5 cm.

6. Display the vertical line between the columns.

7. Key in the following text and do all manipulation as indicated below:

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Column 1:
NORTON ANTIVIRUS:
‡
Virus warning signs!
‡
Missing files
Spontaneous crashes
Very slow startup
Printer issues

Column 1:
Letter size: 10 pt
Left-align

Column 2:
Insert the picture saved as VIRUS1. The size of the picture must be 1.38"/ 3.5 cm in width and 1.38"/3.5 cm in height. Insert a double-line border around the picture and centre.

Column 3:
VIRUS PRECAUTIONS:
‡
Do not share entire C:
Install a firewall
Avoid suspicious attachments
Perform a system scan
Keep your antivirus up to date
Keep your virus scanner enabled

Column 2:
Letter size: 10 pt
Right-align

8. Leave TWO lines after the columns and switch off columns. Insert a text box with the following text centred, italics, 14 pt and capital letters:

   Why does my computer keep freezing? Oops, did you see that?

9. Leave TWO lines after the text box and insert a double horizontal line from the left- to the right-hand margin.

10. Insert the following footer:

    A horizontal line from the left- to the right-hand margin. Leave TWO lines open after the line and key in the following text in bold, italics, 8 pt and centred:

    Virus signs: Extra files, extra pop-ups, especially on startup: Who sat in my chair?

11. Save the file as Q7 VIRUS.

12. Print the letterhead and place the printout in your EXAMINATION FOLDER.

[25]

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QUESTION 8

QUESTION 8A

Prepare the following data document for merging with other documents:

	LETTER 1	LETTER 2	LETTER 3
VIRUS SYMPTOMS	Slow startup	Missing files	Hardware troubles
OPERATING SYSTEM	Microsoft	Open-source	Apple
EXAMPLE	Windows	Linux	Yosemite
TOWN	Durban	Cape Town	Johannesburg
DATE	1 May 2016	1 June 2016	1 July 2016
ANTIVIRUS	Norton	QUESTION 8A	EXAMINATION NUMBER
VIRUS	My Doom	Trojan Horse	OSX/Leap A
VULNERABILITY	Very high	Very low	Extremely low

1. Use Arial 10 pt/8 cpi.

2. Ensure that the QUESTION NUMBER and EXAMINATION NUMBER appear in the ANTIVIRUS field of LETTER 2 and LETTER 3 as indicated above. Do NOT insert your EXAMINATION NUMBER and QUESTION NUMBER as headers.

3. Make sure that ALL the information in the table is visible and appears on ONE row. Do NOT wrap the text.

4. Change the paper orientation to landscape.

5. Save the document as Q8A NORTON.

6. Print the document and place the printout in your EXAMINATION FOLDER.

(10)

QUESTION 8B

Prepare the following document for merging with other documents in which a presentation regarding a workshop on viruses and antiviruses is given.

1. Retrieve the letterhead Q7 VIRUS.

2. Change the question number in the header to QUESTION 8B.

3. Use Arial 12 pt/10 cpi, except for the letterhead which must remain Comic Sans MS.

4. Leave TWO lines after the letterhead.

5. Key in the text and do all manipulation as indicated in the text.

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6. Insert the field names in bold as indicated in the letter. Do NOT key in the brackets ([ ]), it is only there to indicate the field names.

7. Insert a footnote after the word viruses in the first paragraph in bold, italics and 8 pt: Self-replicating programs also called malware, designed to spread itself from computer to computer

8. The letter must fit on ONE A4 page, portrait orientation.

9. Save the document as Q8B NORTON.

10. Print the document and place the printout in your EXAMINATION FOLDER.

(Insert Q7 VIRUS)
‡
Insert system date, right-aligned
‡
Computer viruses currently cause billions of dollars' worth of damage each year. We invite you to a **[VIRUS]** virus workshop on **[DATE]** in **[TOWN]**.
‡
This session will focus on symptoms of viruses like **[VIRUS SYMPTOMS]** specifically in **[OPERATING SYSTEM] [EXAMPLE]** where **[VIRUS]** viruses are common.
‡
[OPERATING SYSTEM] is known to have a **[VULNERABILITY]** susceptibility to viruses and the best choice for **[ANTIVIRUS]** antivirus will also be discussed as well as the following topics:
‡

Recovery strategies and methods
Virus removal
Operating system reinstallation
Software bugs
Social engineering and poor security practices
Vulnerability of different operating systems to viruses
Infection targets and replication techniques
Resident versus nonresident viruses
Macroviruses
Boot sector viruses

Change line spacing to 1
Sort text alphabetically
Insert a table with 1 column and 10 rows: Insert text in the table
Adjust table according to text size
Centre table horizontally

‡
Keep your eye on social media for further details! We hope to see you there.

(26)

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QUESTION 8C

1. Use the merge function of your word processing program and merge the presentations.

2. Change the question number in the header to QUESTION 8C.

3. Ensure that the footnote number stays the same on all the pages.

4. Insert the following endnote in bold, 8 pt in the third letter after the words Virus removal: Reinstalling the operating system is one approach for virus removal

5. Save the merged documents as Q8C NORTON.

6. Print the letters and place the printouts in your EXAMINATION FOLDER.

(13)

QUESTION 8D

You need to create labels to promote the virus and antivirus workshops.

1. Use landscape orientation.

2. Use the appropriate function of your word processing program to create labels. Create 20 labels (4 columns and 5 rows).

3. Display the borders of all 20 labels.

4. Use Arial 12 pt/10 cpi.

5. Key in the heading NORTON ANTIVIRUS centred and bold on all the labels. Leave TWO lines after the heading NORTON ANTIVIRUS that appears in each label.

6. Make use of the data in QUESTION 8A to prepare labels for the viruses. The following data must appear on the labels:

   OPERATING SYSTEM
   EXAMPLE
   VIRUS
   VULNERABILITY

   The data must be right-aligned as follows:

   The data of Microsoft on the first label in row 2
   The data of Open-source on the first label in row 3
   The data of Apple on the first label in row 4

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7. Copy the data of each OPERATING SYSTEM to the second, third and fourth label.

8. Insert your EXAMINATION NUMBER and the QUESTION NUMBER as follows:

   EXAMINATION NUMBER: Row 1, Label 1
   QUESTION NUMBER: Row 1, Label 2
   Left-align above information

   Do NOT insert your EXAMINATION NUMBER and QUESTION NUMBER as a header.

9. Save the labels as Q8D NORTON.

10 Print the labels on ONE A4 landscape page and place the printout in your EXAMINATION FOLDER.

(14)
[63]

OR

SECTION C: SPREADSHEET 150 MARKS

INSTRUCTIONS:

1. Read the instructions for each question carefully before you answer the questions.

2. Use Arial 10 pt or Calibri 11 pt, except when receiving other instructions. Do NOT use proportional spaced fonts.

3. The following information must appear on each page as a HEADER:

   QUESTION NUMBER EXAMINATION NUMBER

   Align the QUESTION NUMBER against the left-hand margin.

   Align your EXAMINATION NUMBER and COMPUTER NUMBER against the right-hand margin.

4. ALL lines in the spreadsheet must be inserted using the method with which you are familiar.

5. Use the date/time function to insert all dates and time.

6. Refer to ALL values that need to be repeated as absolute cell references.

7. ALL printouts must fit on ONE A4 page unless otherwise specified. If a spreadsheet does not fit on ONE page, portrait orientation, you may use landscape orientation.

8. Put ALL printouts in your EXAMINATION FOLDER.

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QUESTION 9

QUESTION 9A

1. Retrieve the file VIRUSES PRE 1990 as displayed below.

2. Insert the QUESTION NUMBER, your EXAMINATION NUMBER and the COMPUTER NUMBER as indicated in the instructions.

3. Assign the name FIRST to the THREE cells in column B where the values appear and the name SECOND to the THREE cells in column C where the values appear.

4. Save the spreadsheet as PRE 1990.

	A	B	C	D
1	A SHORT COMPARISON			
2	THE MOST FAMOUS VIRUSES AND MALWARE			
3	DAMAGES BY COMPUTER VIRUSES			
4				
5	**TIMEFRAME: PRE 1990**			
6				
7	TOTAL INFECTIONS REPORTED:	250000		
8				
9	INFECTIONS REPORTED			
10	VIRUS	JAN-JUN	JUL-DEC	% OF TOTAL INFECTIONS REPORTED
11				
12	Animal	35000	40000	A
13	Brain	32000	43000	B
14	Wabbit	40000	60000	C
15				
16	Months total:	D	E	F
17	Total:	G		

5. Retrieve the file VIRUSES POST 1990 as displayed on the next page.

6. Insert the QUESTION NUMBER, your EXAMINATION NUMBER and the COMPUTER NUMBER as indicated in the instructions.

7. Assign the name THIRD to the THREE cells in column B where the THREE values appear and the name FOURTH to the THREE cells in column C where the values appear.

8. Assign the name 1990 to the range A5 ... D17.

9. Save the spreadsheet as POST 1990.

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	A	B	C	D
1	A SHORT COMPARISON			
2	THE MOST FAMOUS VIRUSES AND MALWARE			
3	DAMAGES BY COMPUTER VIRUSES			
4				
5	**TIMEFRAME: POST 1990**			
6				
7	TOTAL INFECTIONS REPORTED:	350000		
8				
9	INFECTIONS REPORTED			
10	VIRUS	JAN-JUN	JUL-DEC	% OF TOTAL INFECTIONS REPORTED
11				
12	The Morris Worm	45000	55000	A
13	Happy 99	45000	65000	B
14	I Love You	60000	80000	C
15				
16	Months total:	D	E	F
17	Total:	G		

10. Retrieve the file VIRUSES POST 2000 as displayed on the next page.

11. Insert the QUESTION NUMBER, your EXAMINATION NUMBER and the COMPUTER NUMBER as indicated in the instructions.

12. Assign the name FIFTH to the THREE cells in column B where the values appear and the name SIXTH to the THREE cells in column C where the values appear.

13. Assign the name 2000 to the range A5 ... D18.

14. Save the spreadsheet as POST 2000.

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	A	B	C	D
1	A SHORT COMPARISON			
2	THE MOST FAMOUS VIRUSES AND MALWARE			
3	DAMAGES BY COMPUTER VIRUSES			
4				
5	**TIMEFRAME: POST 2000**			
6				
7	TOTAL INFECTIONS REPORTED:	500000		
8				
9	INFECTIONS REPORTED			
10	VIRUS	JAN-JUN	JUL-DEC	% OF TOTAL INFECTIONS REPORTED
11				
12	Anna Kournikova	55000	75000	A
13	Storm Worm	65000	95000	B
14	OSX/Leap A	100000	110000	C
15				
16	Months total:	D	E	F
17	Total:	G		
18	Total for all infections:	H		

15. Make use of the THREE files you saved and combine them into a new spreadsheet as follows:

A1: The file PRE 1990
Leave TWO rows open.
A20: Insert the range 1990 you created in the file POST 1990.
Leave TWO rows open.
A35: Insert the range 2000 you created in the file POST 2000.

16. Insert formulae/functions where letters of the alphabet appear to do the following calculations:

A Calculate the % OF TOTAL INFECTIONS REPORTED for Animal, The Morris Worm and Anna Kournikova by making use of the absolute cell reference function using the values given in B7, B22 and B37 respectively.

B Calculate the % OF TOTAL INFECTIONS REPORTED for Brain, Happy 99 and Storm Worm by making use of the absolute cell reference function using the values given in B7, B22 and B37 respectively.

C Calculate the % OF TOTAL INFECTIONS REPORTED for Wabbit, I Love You and OSX/Leap A by making use of the absolute cell reference function using the values given in B7, B22 and B37 respectively.

D Calculate the Months total for JAN-JUN.

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E Calculate the Months total JUL-DEC.

F Calculate the Months total for % TOTAL INFECTIONS REPORTED.

G Calculate the Total.

17. H Calculate the Total for all infections.

18. Centre the headings in the first THREE rows horizontally.

19. Display all values in columns B and C as integers with NO decimal and the values in column D as percentage with NO decimal.

Save the document as Q9A STATS and print the document without row and column headings in portrait orientation on ONE page. Place the printout in your EXAMINATION FOLDER. (24)

QUESTION 9B

1. Retrieve the document Q9A STATS and change the QUESTION NUMBER in the header to QUESTION 9B.

2. Display the formulae. Change the column width so that ALL formulae are legible.

3. Save the document as Q9B STATS.

4. Print the document with row and column headings as well as gridlines in portrait orientation on ONE page. Place the printout in your EXAMINATION FOLDER.

(16)
[40]

QUESTION 10

QUESTION 10A

1. Retrieve the document DAMAGES.

2. Create a pie graph to display the damages in percentages for the SIX viruses listed for 1992.

3. Display the chart titles as follows:

First line: A short estimation of damages done by computer viruses
Second line: QUESTION 10A and your EXAMINATION NUMBER
Do NOT insert the QUESTION NUMBER and your EXAMINATION NUMBER as headers.

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4. Display all data label percentages on the graph as inside end.

5. Display the legend left of the graph.

6. Explode the segment of The Morris Worm.

7. Save the graph as Q10A DAMAGES.

8. Print the graph as a new sheet in landscape orientation and place the printout in your EXAMINATION FOLDER.

(10)

QUESTION 10B

1. Retrieve the document Q10A DAMAGES.

2. Use the pie graph you created in QUESTION 10A and edit it as follows:

3. Change the chart type from pie to column.

4. Add the data of the 2015 column as a line graph.

5. Edit the data on the graph as follows:

   5.1 Chart title: QUESTION 10B and your EXAMINATION NUMBER
   Do NOT insert the QUESTION NUMBER and your EXAMINATION NUMBER as headers.

   5.2 Display all the data label percentages on the graph.

   5.3 Display the legend at the bottom of the graph.

   5.4 Ensure that the X-axis displays the Viruses and the Y-axis the Percentage.

   5.5 Insert the X-axis title: MAIN SIX VIRUSES

   5.6 Insert the Y-axis title: ESTIMATED DAMAGE VALUES

6. Save the graph as Q10B DAMAGES.

7. Print the graph as a new sheet in landscape orientation with gridlines and place the printout in your EXAMINATION FOLDER.

(16)
[26]

QUESTION 11

QUESTION 11A

1. You are analysing statistics of viruses. Key in the spreadsheet exactly as indicated on the next page.

2. Insert the QUESTION NUMBER, your EXAMINATION NUMBER and COMPUTER NUMBER as indicated in the instructions.

3. Insert the following footer centred, italics and 16 pt: VIRUS: Self-replicating software

4. Make the changes as indicated below and on the spreadsheet.

5. Insert formulae/functions where letters of the alphabet appear to do the following calculations:

   A Calculate the VIRUS AGE by using the DATE INVENTED and the current year given in cell C4. Display your answers as integers.

   B Determine if the virus is MATURE OR NEW: If the VIRUS AGE is more than FIFTEEN years the answer should be MATURE, otherwise the answer must be NEW.

   C Assign the name VIRUS to the reference table in cells A14 to B20. Use this range name and make use of the appropriate spreadsheet function to determine VIRUS TYPE.

   D Assign the name DAMAGE to the reference table in cells A24 to G25. Use this range name and make use of the appropriate spreadsheet function to determine DAMAGE % RATING. Display your answers as integers.

6. Insert the picture saved as VIRUS1 in cell D14. Ensure the size of the picture is 1.18"/3 cm in width and 1.18"/3 cm in height.

7. Centre the document vertically and horizontally.

8. Save the document as Q11A VIRUSES and print the document without row and column headings in landscape orientation on ONE page. Place the printout in your EXAMINATION FOLDER.

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	A	B	C	D	E	F	G	H
1	COMPUTER VIRUSES: MALICIOUS SOFTWARE WHICH WE ALSO CALL MALWARE							
2								
3	The following is a history of some of the most famous viruses							
4			01-Jan-15					
5	VIRUS/MALWARE	DATE INVENTED	VIRUS AGE	MATURE OR NEW	VIRUS NAME	VIRUS TYPE	VIRUS	DAMAGE % RATING
6	Beast or Rat	01-Jan-02	A	B	OSX/Leap A	C	Samy XXA	D
7	Zeus	01-Jan-07			Laroux		Kenzero	
8	Core Wars	01-Jan-59			KoopFace		Creeper	
9	Cryptolocker	01-Jan-13			Backoff		Concept	
10	CIH Virus	01-Jan-98			Nyxem		Cascade	
11	Brain	01-Jan-86			Storm Worm		Animal	
12								
13								
14	VIRUS NAME	VIRUS TYPE						
15	Storm Worm	Microsoft						
16	Backoff	Point-of-Sale						
17	OSX/Leap A	Mac OS X						
18	KoopFace	Facebook						
19	Laroux	Linux						
20	Nyxem	Microsoft						
21								
22								
23								

24	VIRUS	Animal	Cascade	Concept	Creeper	Kenzero	Samy XXA
25	DAMAGE % RATING	10	11	12	13	14	15
26							

Bold

Centre

Underline, italics

Centre headings in row 5 horizontally and vertically

Centre headings in rows 14, 24 and 25 horizontally and vertically

(25)

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QUESTION 11B

1. Retrieve the document Q11A VIRUSES and change the question number in the header to QUESTION 11B.

2. Display the formulae. Change the column width so that ALL formulae are legible.

3. Sort the spreadsheet according to VIRUS/MALWARE and the corresponding data alphabetically.

4. Delete the footer.

5. Hide columns E and G as well as the TWO reference tables.

6. Save the document as Q11B VIRUSES.

7. Print the document with row and column headings in landscape orientation on ONE page. Place the printout in your EXAMINATION FOLDER.

(25)
[50]

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QUESTION 12

QUESTION 12A

1. You are looking at the cost of implementing an antivirus system and software at your company. Key in the spreadsheet exactly as indicated on page 30.

2. Insert the QUESTION NUMBER, your EXAMINATION NUMBER and COMPUTER NUMBER as indicated in the instructions.

3. Insert formulae/functions where letters of the alphabet appear to do the following calculations:

   A Calculate the ANNUAL LICENCE FEE which is 15% of the PRICE.

   B Calculate the FIREWALL PRICE which is twice the amount of the ANNUAL LICENCE FEE.

   C Calculate the TOTAL PRICE (all costs multiply by NUMBER OF USERS).

   D Insert the TOTAL PRICE of Panda Free in cells D10, D11 and D12.

   E Calculate the MONTHLY PAYMENT by using the appropriate spreadsheet function.

   F Calculate the ANNUAL PAYMENT by using the appropriate spreadsheet formula (not function).

   G Calculate the TOTAL AMOUNT TO BE PAID.

   H Calculate the TOTAL INTEREST TO BE PAID.

4. Display all your answers as currency with TWO decimals.

5. Save the document as Q12A PRICES.

6. Print the document without row and column headings in landscape orientation on ONE page. Place the printout in your EXAMINATION FOLDER.

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	A	B	C	D	E	F	G
1	ANTIVIRUS PRICING AGAINST VIRUSES AND MALWARE				Right-align		
2							
3	ANTIVIRUS	PRICE	ANNUAL LICENCE FEE	FIREWALL PRICE	NUMBER OF USERS	TOTAL PRICE	
4	Panda Free	3999.99	A	B	150	C	
5	Bitdefender	4999.99	↓	↓	150	↓	
6	Kaspersky	5999.99	↓	↓	150	↓	
7							
8							
9	LOAN AMOUNT	MONTHLY INTEREST	TIMEFRAME (MONTHS)	MONTHLY PAYMENT	ANNUAL PAYMENT	TOTAL AMOUNT TO BE PAID	TOTAL INTEREST TO BE PAID
10	D	12.00%	12	E	F	G	H
11	D	12.00%	24	↓	↓	↓	↓
12	D	12.00%	36	↓	↓	↓	↓

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QUESTION 12B

1. Retrieve the document Q12A PRICES and change the question number to QUESTION 12B.

2. Display the formulae. Change the column width so that ALL formulae are legible.

3. Save the document as Q12B PRICES.

4. Print the document with row and column headings in landscape orientation. Place the printout in your EXAMINATION FOLDER.

(14)
[34]

TOTAL SECTION C: 150

GRAND TOTAL: 200

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COMPUTER PRACTICE N6

ANSWER SHEETS

EXAMINATION NUMBER: _____

QUESTION 1:	**/ 15**
QUESTION 2:	**/ 10**
QUESTION 3:	**/ 15**
QUESTION 4:	**/ 10**
TOTAL MARKS:	**/ 50**

SECTION A

THEORY (COMPULSORY) **50 MARKS**

QUESTION 1: INFORMATION SYSTEMS

1.1 _____

_____

_____

_____

_____

_____

(6 x 1) (6)

1.2 _____

_____

_____

_____

(4 x 1) (4)

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1.3 _____

_____

_____

_____

_____

(5 x 1) (5)
[15]

QUESTION 2: OPERATING SYSTEMS

2.1 _____

2.2 _____

2.3 _____

2.4 _____

2.5 _____

2.6 _____

2.7 _____

2.8 _____

2.9 _____

2.10 _____

[10]

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QUESTION 3: VIRUSES

3.1 _____

3.2 _____

3.3 _____

3.4 _____

3.5 _____

3.6 _____

3.7 _____

3.8 _____

3.9 _____

3.10 _____

3.11 _____

3.12 _____

3.13 _____

3.14 _____

3.15 _____

[15]

QUESTION 4: TROUBLESHOOTING

4.1 _____

_____

_____

4.2 _____

_____

_____

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4.3 _____

_____

_____

4.4 _____

_____

_____

4.5 _____

_____

_____

(5 x 2) **[10]**

TOTAL SECTION A: 50

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