GAUTENG DEPARTMENT OF EDUCATION
SENIOR CERTIFICATE EXAMINATION

COMPUTER STUDIES SG
(First Paper: Practical)

OCTOBER / NOVEMBER 2005
OKTOBER / NOVEMBER 2005

TIME: 3 hours

MARKS: 150

INSTRUCTIONS:

- This paper consists of 9 pages. Check that your paper is complete.

- You will receive an examination disk with a label on it and a folder from the invigilator. Write your examination number clearly on the label and complete the cover page of the folder.

- ALL questions are COMPULSORY.

- Save your work on a regular basis – every 10 minutes – on the given disk.

- You may use the full allocated time (3 hours) to answer the questions. Additional time will be allowed for printing. No changes may be made to any document during the printing time.

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  > Diligently follow the instructions at the end of each question in connection with the handing in of printouts and the files that need to be saved on the examination disk. The files and the printouts that need to be handed in, are indicated at the end of each question in a frame similar to this one.

- Arrange your printouts according to the question numbers. Ensure that your examination number is written or printed on each page. Place all the pages in the given folder and staple them to the top left-hand corner on the inside of the folder, with the pages on the inside of the flap folding in.

- Place your disk in the pocket inside the front page of the folder and secure it by stapling the pocket, next to the disk, to the front page. BE CAREFUL NOT TO DAMAGE THE DISK.

QUESTION 1

SPREADSHEET

Load the existing spreadsheet file **COURSES** from your examination disk into your spreadsheet program.
The spreadsheet contains data of a business enterprise offering Computer courses.

Make the following changes:

1.1 Change the page orientation to Landscape. (1)

1.2 Change the spreadsheet heading as follows:
- Use font size 14pt and font type Comic Sans or Arial Black for the heading.
- Centre the heading across columns A – F. (3)

1.3 Bold the column headings and change the column headings' background to grey to look as follows:

NAME	COURSE	COURSE COST	DAY	TEST	EXAM	(3)

Adapt the column widths so that all the data is clearly legible. (1)

1.4 Format the amounts in Column C to display 2 decimal places and the Rand (R) as currency directly in front of the numbers. (2)

1.5 Sort the names alphabetically according to the course.
(First field COURSE and second field NAME) (4)

1.6 Add a double horizontal line after each course e.g. after OFFICE XP. (2)

1.7 Supply Column G with the heading YEARMARK and determine the year mark as follows: (Test * 30% + Exam * 70%)
If a student was absent during the test, only the exam mark will be used. (5)

1.8 Use Cell B2 as absolute cell reference and use a function to print PASS or FAIL in Column H. A student passes if the year mark >= 60. (5)

1.9 Use functions and determine at the bottom of the spreadsheet the following.
Add a suitable caption to each one.
- The cost of the most expensive course (2)
- The number of students taking the Pastel course (3)
- The average examination mark achieved, rounded to 1 decimal place (3)
- The total cost of all the courses (2)
- The total number of students enrolled for courses (2)

1.10 Use an IF-statement to print a * (asterisk) in Column I for all the students taking Office XP on a Saturday. (5)

1.11 Use a function and add the current date in Cell F2. (1)

1.12 Type your examination number in the header.   (1)

1.13 Create a line graph in a new sheet in the same workbook, displaying the names
      as well as the Test and Exam marks.
      • Supply the graph with the heading: **COMPUTER COURSE RESULTS**
      • Name the axes as follows: X-axis: **NAME**
                                     Y-axis : **MARK**
      • The series (*"legend"*) must clearly indicate that it is Test and Exam marks.
      • All the names must be displayed and the graph must fit onto one page.

      Name the worksheet **GRAPH.**   (7)

1.14 Use a Filter to obtain a list of all the students with a year mark above 70.
      Copy these names and year marks to a new sheet in your spreadsheet file and
      name the new sheet **ABOVE 70%.** Only the names and year marks must be
      displayed.
      After the new worksheet **ABOVE 70%** has been created, the worksheet
      COURSES must again display all the data (the filter must be removed again). (3)

Save the changed document as a spreadsheet file on your examination disk as
COURSESXXX *where XXX represents the last 3 digits of your examination
number.*
You do not have to make a printout.   **[55]**

QUESTION 2

WORD PROCESSING

Create an advertisement for a business that offers computer courses to advertise a
special offer for a certain course.

   Add the following :

   • A suitable picture formatted as follows :
            Make the picture a watermark.   (2)
            Make the text wrapping , behind text .   (1)
            Change the picture's Height to 11 cm and Width to 14 cm.   (2)

   • A suitable name for the business – use WordArt.   (2)
   • Contact person and telephone number   (2)
   • Name of the course   (1)
   • Cost of the course in a star shaped "Autoshape". Make the background of the
     autoshape blue.   (3)
   • Copy the advertisement to fit TWO advertisements on an A4-page.   (2)
   • Type your examination number in the header.

This question will be marked on the computer. Colour and graphics must be used even
if your printer cannot print it.

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*Save your document as **ADVXXX** on your examination disk where XXX represents the last 3 digits of your examination number.*
You do not have to make a printout.

[15]

QUESTION 3

WORD PROCESSING

Load your word processing program and open the existing file **VIRUS** on your examination disk.

3.1   Change the document as indicated.   (11)

VIRUS INFORMATION | Centre heading, different font, larger fontsize

What is a computer virus? bold

(Bullets, align text)

- A virus is a piece of computer code which copies itself, usually without your permission.
- Some viruses have destructive payloads.
- All viruses use up system resources.
- Some viruses hide within other files and are activated when a user opens an infected file.
- Viruses, known as worms, exist as files in their own right.

Move paragraph

How can you protect yourself against computer viruses? italic

You should install good anti-virus software on all machines and update it regularly.
Do not run or download executable files from the internet or any attached to an email.
Change your CMOS bootup sequence, booting from drive A.
Always scan a floppy disk for viruses before using it.
Don't download or copy pirated software.
Don't forward or pay attention to hoax emails.

How do viruses infect computers?   all caps

(L bullets, align text)

L   Viruses transmit via executable code. This can be in executable programs, boot sectors of floppy disks, or macros inside data files.
L   Viruses can enter your computer via emails, floppy disks and CD ROMs.

Total number of viruses detected underline

3.2   Set the margins as follows:
    Left and Right margins 3 cm.
    Top and Bottom margins 2 cm.   (4)

3.3   Type your examination number in the header .   (1)

3.4   Number the pages at the bottom right of the footer.   (2)

3.5   Change the third paragraph   (**"How can you protect yourself..."**) as follows:
    Set the line spacing to 1.5.   (1)
    Justify the paragraph.   (2)
    Add a red border with width 3pt around the paragraph.   (2)

3.6   The following table shows the number of viruses detected during the last 7 years.

YEAR	1998	1999	2000	2001	2002	2003	2004
TOTAL NUMBER	20000	47000	58000	70000	83000	98000	111000

    3.6.1   Type the table in beneath the heading "**Total number of viruses detected**" in the document.   (3)

    3.6.2   Use the table to create a Column chart IN YOUR SPREADSHEET PROGRAM that clearly shows how many viruses have been detected between 1998 and 2004.
- Supply the graph with the heading: **VIRUSES DETECTED**
- Name the axes as follows: X-axis: **YEAR**
                                      Y-axis: **TOTAL NUMBER**

The X-axis must clearly show the years.

The graph must look as follows:

VIRUSES DETECTED

(5)
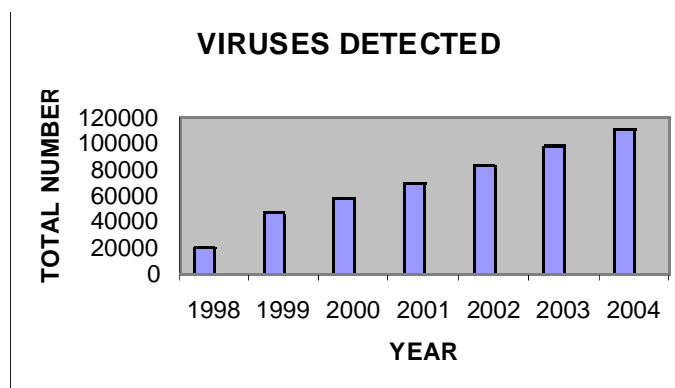
    3.6.3   Copy the graph to the word processing document VIRUS, just below the table. (The graph will only be marked in the word processing document.)   (1)

3.7   Add a page break just before the heading: "**Total number of viruses detected.**"   (2)

Save the changed document as a word processing file on your examination disk as **VIRUSXXX** where XXX represents the last 3 digits of your examination number.
You do not have to make a printout.   **[34]**

QUESTION 4

DATABASE

Load the existing file **STAFF** from your examination disk into your database program.

The table **EMPLOY** contains the following fields:

Persnum:	The employee's unique staff number
Name:	The surname and initials of the employee
Sex:	M for male and F for female
Appointment:	P indicates that the employee has a permanent appointment and T indicates that the employee has a temporary appointment
Salary:	The gross salary per month of the employee

4.1   Change(rename) the name of the table **EMPLOY** to **EMPLOYXXX** where XXX represents the last 3 digits of your examination number.   (1)

4.2   Add a primary key NUM to number the records automatically from 1 onwards.   (2)

4.3   Add the following data of a new employee:
5322   HEYNS W.P.   M   T   7500   (2)

4.4   JOLI H. has resigned and his record must be deleted.   (1)

4.5   Change the column SALARY to display the currency in Rand.   (2)

4.6   Add a validity test to the field APPOINTMENT.
APPOINTMENT must be a **P** or a **T**. (Existing data must not be tested for validity.)
A text message "**Only P or T**" must be displayed when an invalid character is typed in.   (4)

4.7   4.7.1   Create a query to determine all the men with a permanent appointment and an income above R7000 per month.
Only the NAME must be displayed.
The names must be sorted alphabetically.   (5)

> *Save the query as **PERMXXX** where XXX represents the last 3 digits of your examination number.* **Print the query in design view.**

        4.7.2   Compile a report of these men.
- The report must only contain the NAME.   (2)
- Supply the report with the heading SALARY >R7000.   (1)
- Add your examination number as a page footer.   (1)

> *Save the report as **PERMREPXXX** where XXX represents the last 3 digits of your examination number.*
> **Print the report.**

4.8   Compile a report of all the employees in the following format:

- The report must contain the NAME and APPOINTMENT.
  Group the report according to the APPOINTMENT. Employees with
  permanent appointments first followed by employees with temporary
  appointments. (4)
- Supply the report with the heading EMPLOYEE LIST.
  Centre the heading. (2)
- Use a function at the bottom of the report to determine the number of
  employees in each group. The number must be shown with a suitable
  caption. (3)
- The records of permanent employees must be on one page and those of
  temporary employees on the next page. (You must add a page break). (2)
- Add your examination number as a page footer. (1)

*Save the report as **GROUPSXXX** where XXX represents the last 3 digits of your examination number.*
 Print the report.

4.9   The management of the business plans for a 5% salary increase for all the
employees. Create a query to determine the new salary of each employee.
(The new salary is SALARY * 105/100).

The Column header must be **NEW SALARY**.
The columns NAME , SALARY and NEW SALARY must be displayed. (5)

*Save the query as **INCXXX** where XXX represents the last 3 digits of your
examination number.* ***Print the query in design view.***   **[38]**

QUESTION 5

INTEGRATION

Create the following document (form letter) in your word processing program and use the Table EMPLOY (or EMPLOYXXX) from the file **STAFF** from QUESTION 4 to insert the required fields:

NOTICE OF SALARY INCREASE

<<NAME>>

Date of increase: 31 July 2005

Existing salary: << SALARY>>

Salary increase: 5%

- Type your examination number in the header.

- Print notices for any two employees.

Save the document as a word processor file on your examination disk as **NOTICEXXX** *where XXX represents the last 3 digits of your examination number.* ***Print notices for any two employees****.*   **[8]**

TOTAL: 150

END