

INFORMATION COMMUNICATION TECHNOLOGY (ELECTIVE)

SCHEME OF EXAMINATION

There will be three papers, Papers 1, 2 and 3 all of which must be taken. Papers 1 and 2 will be a composite paper to be taken at a sitting.

PAPER 1: Will consist of fifty multiple-choice objective questions all of which must be answered within 1 hour for 25 marks.

PAPER 2: Will consist of five essay-type questions. Candidates will be required to answer three questions within 1 hour for 30 marks.

PAPER 3: Will be a practical test consisting of three questions all of which must be answered within 2 hours, for 45 marks.

Alternative to Practical Test

In the event of constraints on the acquisition of facilities, the council may consider testing theoretically, candidates' familiarity with the practical work prescribed in the syllabus. The paper will consist of three questions all of which must be answered within 2 hours for 45 marks.

SAMPLE QUESTIONS

PAPER 1 **(OBJECTIVE)**

1. Spooling is necessary because
 - A. it is a more secure method of accessing data.
 - B. print jobs go more smoothly with less stop and go.
 - C. the computer is released to do other things while still printing.
 - D. it enables the operating system to function properly.

2. In a conditional format, you may set any of the following:
 - A. font, font size and font colour.
 - B. font, font size, font colour and fill colour.
 - C. font, font size, font colour, fill colour and border.
 - D. font, font style, font size, font colour, fill colour and border.

3. A datasheet displays data in a
 - A. table with rows and columns.
 - B. form showing one record.
 - C. print-out.

- D. scatter format
4. Choose the answer that best describes the result when the given line of code is executed:
LET X +=Y-2
- A. The variable X and Y both receive the value 2.
B. The variable X receives the value of Y squared.
C. An error message is displayed due to a type mismatch.
D. The variable X receives the value Y minus 2.
5. The ROM memory which is erasable using software tools, and commonly used for BIOS chips is the
- A. PROM
B. ROM
C. EPROM
D. EEPROM
6. Which of the following is immune to electromagnetic or radio frequency?
- A. Coaxial cabling
B. Fibre-optic cabling
C. Twisted-pair cabling
D. CSM A/CD
7. In word processing application when a text box has more texts than will fit inside the box, the extra text is
- A. cropped.
B. wrapped.
C. moved to another text box.
D. hidden.
8. Which of the following is not an example of a desktop publishing program?
- A. Adobe PageMaker
B. Corel Draw
C. Publisher
D. Writer
9. Which of the following is not stored in the computer CMOS?
- A. Hard drive configuration
B. Printer configuration
C. Memory information
D. Date and Time information
10. How many bits represent a hexadecimal digit?
- A. 1
B. 2

- C. 4
- D. 8

PAPER 2
(ESSAY)

1. (a) (i) What are *datatypes* as used in database environment?
Give **four** examples.

(ii) Explain any **three** of the four examples you gave in (i) above.

(b) Databases can be computerised as well as non-computerised.
Give **four** examples of non-computerised databases.
2. (a) Explain the following terms:
 - (i) *e-mail*
 - (ii) *attachment*
 - (iii) *signature file*
(b) (i) Distinguish between *software* and *hardware*.
(ii) Give **two** examples **each** of software and hardware.
3. (a) State **two** services provided by a computer bureau
(b) Explain **three** reasons why a firm may use a computer bureau.
(c) Give any **five** functions of an Information Systems Manager.
4. (a) What is a *computer network*?
(b) List **three** interconnecting network devices.
(c) Write the following acronyms in full:
 - (i) EEPROM
 - (ii) SIMM
 - (iii) SRAM
 - (iv) CAD

PAPER 3
(PRACTICAL TEST)

1. (a) Load an appropriate word processing program and type the following text:

MEMORY MANAGEMENT

Memory is the term used to refer to Random Access Memory (RAM) which is part of the main memory of the computer. When you need a program, OS retrieves it from the disk and loads it into its memory. But before it is loaded, the OS checks whether memory is available for it or not and if available the space is allocated to your job. Once the execution of the job is over, the job should be removed from memory. This will free memory space which can be allocated by the OS to another job.

- (b) Save your text as SHS\ICT1\2010\memory on your storage medium.
 - (c) Replace all OS in the text with operating system.
 - (d) Bold underline and centre the heading.
 - (e) Change the font type of the heading to Arial and the Size to 16.
 - (f) Use character spacing to space the heading by 1.0 expanded format.
 - (g) Change the line spacing of the text to double.
 - (h) Save the document as SHS\ICT1\2010\mem on your storage medium.
 - (i) Print SHS\CT1\2010\mem.
2. (a) Use an appropriate spreadsheet package to create the table below.

INDEX NO.	JANUARY	FEBRUARY	MARCH
11678G	27	81	81
11679G	55	61	63
11680G	72	63	33
11681G	42	14	42
11682G	63	81	55
11683G	72	72	72

- (b) Use formula only to determine the average for **each** month.
- (c) Save the work as 'Result'.

- (d) Use an appropriate function\formula to find the frequency of the numbers 55, 63, 72, 81.
- (e) Using the result from (d), create an embedded pie chart with heading Quarterly Performance.
- (f) Name the sheet as 'Performance'.
- (g) Use headers to insert your index number and save as 'Results A'
- (i) Print Result A.

3. The allowance paid to NGY staff at the end of the month is dependent on the extra hours worked beyond the closing hours. The official working hours are stated as 9.00 a.m to 5.00 p.m or 08.00 hours to 17.00 hours.

Write a program using QBASIC to do the following:

- (a) Obtain the closing hours of a staff, staff identification.
- (b) Compute the overtime in hours of a staff.
- (c) Compute the allowance due each staff.
- (d) Display
 - (i) Staff closing hours,
 - (ii) Staff ID,
 - (iii) Overtime of the staff,
 - (iv) Allowance computed,
 - (v) Your index number.
- (e) Save your program as NGY Staff Allowances.