



UGANDA INSTITUTE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY

END OF SEMESTER ONE EXAMINATIONS

ACADEMIC YEAR 2022/2023

DEPARTMENT: ICT

SEMESTER: ONE

**PROGRAMME(S): HIGHER EDUCATION CERTIFICATE – ENGINEERING (HECE)
HIGHER EDUCATION CERTIFICATE – BUSINESS (HCEE)**

YEAR OF STUDY: ONE

COURSE: COMPUTING SKILLS

COURSE CODE : HECE114/HECPMIIS

DATE: FRIDAY 24TH, MARCH 2023

TIME: 9:00 AM – 12:00 NOON

DURATION: 3 HOURS

INSTRUCTIONS:

- (i) This paper contains two Sections: A (40 marks) & B (60 marks).**
- (ii) Attempt ALL questions in Section A, and ONLY THREE questions in Section B.**
- (iii) All questions in Section B carry equal marks.**
- (iv) Credit will be given for use of relevant examples and illustrations.**
- (v) Answers to SECTION A must appear in the answer booklet provided to you. Answers to SECTION B should be saved on the desktop in a folder labeled YOUR SURNAME_REGNO e.g., NKURUNUNGI_2020/HCEE/100**
- (vi) DO NOT write on this question paper**

SECTION A [40 MARKS]

Attempt **ALL** the Questions in this Section.

Question 1

Write the correct alternative in the answer booklet provided

(1 mark @)

1. Which device is used as the standard pointing device in a Graphical User Environment
a) Keyboard b) Mouse c) Joystick d) Track ball
2. Which of the following devices have a limitation that we can only write information to it but cannot erase or modify it
a) Flash disk b) Hard Disk c) Memory card d) CDROM
3. The programs which are as permanent as hardware and stored in ROM is known as
a) Hardware b) Software c) Firmware d) ROMware
4. Primary memory stores
a) Data alone b) Programs alone c) Results alone d) All of these
5. _____ runs on computer hardware and serve as platform for other software to run on
a) Operating System b) Application Software c) Utility Software d) All
6. CD-ROM stands for
a) Compactable Read Only Memory b) Compact Data Read Only Memory
c) Compactable Disk Read Only Memory d) Compact Disk Read Only Memory
7. ALU stands for _____
a) Arithmetic Logic Unit b) Array Logic Unit
c) Application Logic Unit d) None of above
8. A device with a USB port can be plugged in while the computer is running:
a) True b) False
9. The name a user assigns to a document is called a _____
a) filename b) program c) record d) data
10. Default settings are selections that are applied automatically by the application unless you change them
a) True b) false
11. Quickly pushing the mouse button twice is called
a) snapping b) double clicking c) Clicking d) Taping

12. The Windows Desktop is the opening screen in Windows when the operating system
a) is fully loaded in RAM. b) has a problem c) is loading d) fails to boot
13. The Sizing buttons in any window include the following apart from
a) the Close button b) the Maximize button
c) the minimal button d) the restore button
14. A web browser is an application software which enables one to
a) connect to a computer network b) open web pages
c) ping a computer d) send email
15. Headphones and speakers are some of the _____ devices of a computer.
a) input b) Processing c) manipulating d) output
16. A system unit is a box-like case that contains computer's electronic components sometimes called the
a) chassis b) CPU c) motherboard d) keyboard
17. A bit includes either of the two digits 0 and 1 in the _____ number system.
a) Analogue b) Hybrid c) Binary d) Bytes
- 18 Which of the following is true?
a) CTRL + C cuts a file b) CTRL + C copies a file
c) CTRL + X saves a file d) CTRL +X copies files
- 19 A microcomputer is often called a PC. The abbreviation 'PC' stands for
a) Personal Computer b) Portable Computer
c) Personal Computers d) Personal PC
- 20 Which of the following is a characteristic of second generation computers?
a) Diodes b) Transistors c) Vacuum tubes d) Integrated circuits
- 21 The output displayed on the screen is called.....
a) A Photocopy b) A Softcopy c) Master-copy d) Hard-copy
22. Which of the following displays the contents of the active cell?
a) Name Box b) Formula Box c) Formula Bar d) Menu bars
23. Pressing the [Tab] key while in the last cell of a table will....
a) Add a new row b) Add a new column
c) Take you to the end of the table d) Add a tab character

24. The backspace key:
- Erases any character towards the left of the curse
 - Deletes any character towards the right of the curse
 - Moves the curse to left without deleting characters
 - Deletes a character at the curse position
25. A computer network is two or more computers connected together for the purpose of _____
- connecting to the internet
 - downloading music files and software
 - updating Whatsapp profile
 - communication and sharing resources
26. A computer virus is a malicious program that does the following except, _____
- Creates unwanted files
 - Slows down the computer
 - Destroys unwanted software
 - Clogs computer memory
27. Collectively, the four operations of input, process, output and storage is considered to be the:
- Information processing cycle
 - Computer processing cycle
 - motherboard processing cycle
 - none of the above
28. _____ Conveys meaning and is useful to one or more people.
- The control unit
 - Information
 - Memory
 - none of the above
29. _____ is a set of detailed instructions given to a computer
- A central processing unit
 - A computer program
 - An input device
 - none of the above
30. The difference between hardware and software is that hardware is
- Tangible while software is intangible.
 - Permanent while software is temporary
 - Metallic while software is plastic.
 - Reliable while software is unreliable.
31. Which of the following is word processing software?
- Microsoft Word
 - Microsoft Excel
 - Google Chrome
 - Microsoft Outlook
32. The difference between primary memory and secondary storage is that the memory is _____ and storage is _____
- Temporary, permanent
 - Permanent, temporary
 - Slow, fast
 - None of the above
33. Which of the Following holds the ROM, CPU, RAM and expansion cards?
- Hard disk
 - Floppy disk
 - Mother board
 - None of the above

34. The language that the computer can understand and execute is called _____
a) Machine language b) Application software
c) System program d) None of the above
35. Actual execution of instructions in a computer takes place in
a) Screen b) CPU
c) Storage unit d) None of the above
36. Which of the following is used as a primary storage device
a) Magnetic tape b) Hard disk
c) Floppy disk d) None of the above
37. Execution of two or more programs by a single CPU is known as :
a) Multiprocessing b) Time sharing
c) Multiprogramming d) None of the above
38. What does a graphical user interface comprise of?
a) Text commands b) icons and menus c) images d) desktop display
39. Memory which is read only is called
a) RAM b) ROM c) cache memory d) virtual memory
40. One thousand bytes represent a
a) Megabyte b) Gigabyte c) Kilobyte d) None of the above

SECTION B [60 MARKS]

Attempt **ONLY THREE** Questions in this Section.

Question 2

Digital Literacy is defined as the knowledge and ability to use digital electronics and related technology efficiently, with a range of skills covering levels from elementary use to programming and advanced problem solving. Digital literacy can also refer to the comfort level someone has with using digital programs and other applications that are associated with digital electronics. Another valuable component of digital literacy is knowing how digital electronics operate. Having basic digital skills is a significant asset in the developed countries.

The precise definition of "**Digital literacy**" can vary from group to group. Generally, literate (in the realm of books) connotes one who can read any arbitrary book in their native language[s], looking up new words as they are exposed to them. Likewise, an experienced digital professional may consider the ability to self-teach (i.e. to learn arbitrary new programs or tasks as they are encountered) to be central to digital literacy. In common discourse, however, "digital literate" often connotes little more than the ability to use several very specific applications (usually Microsoft Word, Microsoft excel, Internet, and Microsoft Outlook among others) for certain very well-defined simple tasks, largely by rote. (This is analogous to a child claiming that they "can read" because they have rote-memorized several small children's books. Real problems can arise when such a "digital literate" person encounters a new program for the first time, and large degrees of "hand-holding" will likely be required.) Being "literate" and "functional" are generally taken to mean the same thing. For digitals equipment to operate well, they need moderate room temperatures such as 20.2 °C (68.1 °F).

- (a) Type the passage provided above as it is in Microsoft Word and save it as **Digital literacy_Q1.** (4 marks)
- (b) (i) Insert the Header as your Name and Registration number (2 marks)
(ii) Justify the passage and use font Monotype Corsiva. (2 marks)
(iii) Insert page number using roman numerals at the footer (2 marks)
(iv) Insert a diagonal watermark called Fundamentals of ICT 1 (1 mark)
- (c) Format the document as follows
 - (i) Use font size 13.5 for the body of the passage (1 mark)
 - (ii) Use 1.15 line spacing for your work (1 mark)
- (d) Format the heading as follows:
 - (i) Use font size 15 for Heading, upper case (1 mark)
 - (ii) Bold the heading, double underline and apply italics. (2 marks)

(e) Adjust page settings as follows

(i) Top & bottom Margins 0.9"

(1 mark)

(ii) Left & Right Margins 0.8"

(1 mark)

(f) Replace **literacy** with the word **knowledge** in the whole document
(1 mark)

(g) Drop cap the first letter to cover two lines for each paragraph

(1 mark)

Question 3

a) Create the table below as it is using spreadsheet program. Save your work as **Employee payRoll_Q2**
(3 marks)

No.	First name	Surname	Basic pay (shs)	Utility	Housing	Transport	Gross Pay	PAYE	Net Pay
1	Bosco	Mukasa	560000						
2	David	Kabaale	235000						
3	Sarah	Mwesige	347000						
4	Patrick	Isabirye	642000						
5	Lillian	Nakuya	669000						
6	George	Akena	325000						
7	Susan	Nakimera	423000						
8	Stella	Kidega	260000						
9	Ambrose	Omio	463000						
10	Abraham	Ssensiti	180000						

Given the following information:

- **Utility** is 15% of Basic pay
- **Housing** and **Transport** allowances are uniform for all staff members at 40,000 and 30,000 respectively.
- **PAYE** is computed on Gross pay basing on the table below

Income bracket (Gross pay)	PAYE
0-210000	6% of gross pay
210001-420000	10% of the gross pay
420001-620000	15% of the gross pay
Above 620000	20% of the gross pay

(b) Using the information given above, insert the following columns in the worksheet and using excel functions and formulae, compute the following:

- (i) Utility (2 marks)
- (ii) Housing (1 mark)
- (iii) Transport (1 mark)
- (iv) Gross Pay (Basic pay plus utility and allowances) (2 marks)
- (v) PAYE (2 marks)
- (vi) Net Pay (2 marks)

(c) Management intends to increase employee's basic pay by 12% in the following month, compute their **new basic pay** (2 marks)

(c) Plot a line graph showing surname of employees and their gross pay in a different sheet called **Gross_Pay graph**. The graph should have data labels, a title, a legend and labeled axes (2 marks)

(d) Insert the footer using your registration number at the center section (1 mark)

(e) Find the Maximum and the Minimum employee's new basic pay (2 marks)

Question 4

An organization has the following information about its workers, :

EMP_No	SURNAME	FIRST NAME	SEX	OCCUPATION	DEPARTMENT	SALARY	DATE OF BIRTH
AD301	Nakku	Mary	F	Secretary	Information	275,000	20 June 1960
AD213	Okello	John	M	Driver	Administration	265,000	16 May 1965
AD201	Agaba	Mark	M	Consultant	Business	500,000	15 June 1963
AD307	Aliyo	Joyce	F	Secretary	Computing	275,000	20 Aug 1972
AD150	Nassuna	Harriet	F	Librarian	Information	310,000	16 July 1974
AD215	Muttebi	James	M	Consultant	Information	600,000	7 Nov 1968

AD261	Adongo	Jackie	F	Instructor	Computing	430,000	7 July 1980
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Using the above information,

- a) Design a suitable database to manage the above information. Name the database **EMPLOYEE_DATABASE** (3 marks)
- b) Create a new table using design view having appropriate data types, name the table **EMPLOYEE_TABLE** (4 marks)
- c) Create a form called **EMPLOYEE ENTRY FORM** and use it to enter the above records (4 marks)
- d) Create a query displaying all fields in the above table to filter out only employees from department of information, save it as **EMPLOYEES FROM INFORMATION DEPARTMENT** (3 marks)
- e) Create another query displaying all fields to display employees with salary less than 310,000. Name it **SALARY SCALE FOR EMPLOYEES** (3 marks)
- f) Create a report using the EMPLOYEE _TABLE and group the records by department. Name it **EMPLOYEE REPORT BY DEPARTMENT** (3 marks)

Question 5

Assuming you are asked to make a presentation to a panel of 10 executives and the result will determine whether you get employed or not. You are asked to choose a topic of your choice from the following Topics: Sports, Fashion, Politics, Religion.

- a) Open appropriate application, insert of 7 slides and save it as **My World** in your folder (4 marks)
- b) Apply on each slide a suitable
 - i) Layout for content to be added (2 marks)
 - ii) Colour designs or template (2 marks)
 - iii) Transition schemes (2 marks)
 - iv) Custom animation (4 marks)
- c) Set your presentation to automatically transition to the next slide after every 4 seconds (3 marks)

Loop your presentation so that the presentation runs continuously until stopped

(3 marks)

END