

ICT Teachers Association of Uganda & St. Joseph of Nazareth High School

Students ICT and computer Studies Sminar
17th /Sept/2022

GENERAL DRAFT PROGRAMME

Time	Activity	In charge
7:30-8:00am	Arrival of students	1. Mr. Magomu Paul
8:00-8:30am	assembling in the main hall Registration Opening remarks Introduction of Staff	1. Mr. Wejuli Moses 2. ITAU President
8:30-9:00am	Syllabus overview	
9:00am-10:00am	Word Processing	Mr. Kakuru Benard
10:10am -11:00am	Working with presentation General tips & common mistakes	Mr. Mukalele Rogers
11:00am-11:30am	break	Host
11:30am-12:30pm	Database in details with support files	Mr. Wejuli Moses
12:30pm-01:30pm	Excel in details with support files	Mr. Kakuru Benard
01:30pm- 02:10pm	Lunch	MC- Wejuli Moses
02:10pm-03:00pm	Publisher in details with support files(for A level students) Web publishing (O level students)	Mr. Lukyamuzi (A Level) Mr. Mukalele Rogers (O Level)
03:00pm-4:30pm	S850/1 and 840/1 Prior preparations: syllabus interpretations Answering skills Basic terms Common mistakes to avoid Question Interpretation and approach	Mr. Magomu Paul (O'Level) Mr. Lukyamuzi Ronald (A'Level)
4:35pm - 5:00pm	Abridged curriculum Choosing the best question Burning CDs	Mr. Wejuli Moses
5:00pm- 5:10pm	Closing & ITAU remarks	Host

Rsvp:

1. Magomu Paul
2. Wejuli moses

GRAND SUB-ICT& COMPUTER STUDIES SEMINAR ON 17th/09/2022
At ST JOSEPH OF NAZARETH HIGH SCHOOL KAVULE KATENDE
PAPER ONE SEMINAR Tel: 0702 612 039

1. (a) What is meant by the term Computer software?
 (b) System software may be categorized into Operating systems, Utility programs and programming languages. Briefly explain, giving an example to each category
2. (a) Mention the **two** types of software programs needed to run a computer efficiently.
 (b) State **three** functions performed by utility software programs.
3. (a) Define the term firewall as used in computing?
 (b) Mention any three forms of unauthorized access
4. (a) Briefly describe the concept of "**green computing**"
 (b) State any **three** advantages of green computing
 (c) Give two netiquette guideline ICT users are supposed to follow in a society
5. Mr. Musota book library uses a database to store information about the different books they have. Part of database is shown below.

Book title	Number of books borrowed	Nature of book cover hard or soft
Introduction to Sub-ICT	56	Yes
Dictionaries	52	No
Uganda constitution	38	No
Encyclopedia	35	Yes

- (a) (i) Which field in the table above stores Boolean data type?
 (ii) Give reason why Boolean data type is used
 - (b) (i) Which field stores numeric data?
 (ii) Give a reason Why Numeric data type is used.
 - (c) Suggest **one** other data type used in the database above.
6. The manager of a supermarket uses a database to store data about the food he sells. This is part of the database.

Food type	Number in stock	Re-order (Y/N)	Last order received
Potato flakes	123	N	23/10/10
Chocolate bar	158	N	25/10/10
Beefburgers	135	N	24/10/10
Gravy	89	Y	17/10/10

For each of the following fields describe an appropriate validation check. You must describe three different validation checks.

- (a) Number in stock
- (b) Re-order (Y/N)
- (c) Last order received

7. Define the following spreadsheets terms
 - (i) Relative referencing
 - (ii) Absolute referencing
 (a) Explain the meaning of the following spread sheets cells error messages
 - (i) #VALUE
 - (ii) #NAME
 - (iii) #NULL
 (b) Tick three appropriate features of spread sheet software which make it suitable for using computer models.

What ifs	
Queries	
Automatic recalculation	
Internet browsing	
Animation	
Data and formulae replication	

8. (a) What is meant by application software?
- (ii) Complete the following table.

Software	Description/Characteristics	Copyrighted (Yes/No)
Packaged Software		
Shareware		
Freeware		
Public Domain software		

- (ii) Give **two** examples for each of the following hardware types.

Input devices
 Output devices
 Storage devices

- (b) Name any two application software used in the following fields

- (i) Spreadsheets
- (ii) Data bases
- (iii) Word processors
- (iv) Presentations
- (v) Publications

9. (a) Identify two ways in which photo editing software can be used to create a photograph that has never existed

- (b) Describe how such photographs might be verified for their authenticity.
- (c) Discuss how the enhancement of digitally produced photographs may be misused.
- (d) You are to design an invitation card for your Sister's wedding. What factors should you consider when designing?

INTERNET

10. a) Distinguish between digital divide and digital migration
b) Mention any two causes of digital divide in society
c) In the recent past Uganda underwent digital migration, as a student of ICT, explain any two advantages and one disadvantage of digital migration in Uganda
11. Explain the following terminologies as used on Internet
- HTML
 - Download
 - WWW
 - Mailing lists
 - Usenet
 - Electronic mail
 - File Transfer Protocol
 - A Web server
 - A blog/WIKI
 - web portal
 - Social media
 - Media sharing sites
 - A content aggregator
12. (a) Briefly explain the following terms as used in internet base communications
- Internet
 - World Wide Web
 - Web browser
 - File transfer protocol (FTP)
 - Telnet
 - Message Board
 - Newsgroup
 - Chat room
 - Instant messaging
 - Teleconferencing (i.e., Videoconferencing)
 - Video on demand (VOD)
- (b) State examples of web browsers
13. Write down the step by step process of safely shutting down an already powered computer
14. (a) Describe how a password-protected web site operates.
(b) Describe two IT features that a computer user would require to access or use this site.
(c) Explain how the new web site could improve student learning.
(d) This system may be a great advantage for students, but it may place teachers with limited IT skills under great pressure. Discuss the concerns of some teachers when they are asked to make this new resource available for the students
15. (a) Identify two processes involved in data logging.
(b) Describe two other ways that automatic data logging may be used.

- (c) Explain two advantages of using automatic data logging to keep records compared with manual data logging.
(d) Information obtained at automatic tolls may also be used to map traffic information and help telecommuters travel on the highways. Some cards may also contain customer's information or an identification number to relate the customer to a record in a driver database for later use.
To what extent do the concerns about invasion of drivers' privacy outweigh the advantages of using this system to improve the traffic of cars in a city?

16. Outline any five services that are offered by the internet service providers.

17. (a) State three advantages of using E-mail software over ordinary postal letters.

(b) What are the uses of the following features of e-mail software?

- To
- BCC
- Forwarding
- Junk Mail Filters

18. Study the URL and answer the questions that follow:

<http://www.ecdl.org/countries/uganda>

- What does http stand for?
- The domain name is
- Which is the top-level domain (TLD) in this URL?
- What does "countries" represent in this URL?
- What is the document name which is currently opened on this website?

19. Internet is becoming almost part of man's life. State any five positive effect of internet to the society.

20. a) Explain the term Domain Name System

b) An e-mail address is given as lubakyoya@gmail.com identify each part of this address

- lubakyoya :
- @ :
- gmail :
- .com :

21. Mobile telephones are used for accessing internet

- Give three advantages of using mobile telephone for internet access
- Give two disadvantages of using mobile telephone for internet access

HARDWARE

1. (a). Define the term computer hardware

- Mention any three parts of a computer system.
- Give the different categories of hardware

2. (a). Mention any three parts that make up a keyboard.

b) Distinguish between Modifier keys and special keys

(c) State the practical importance of the following keys on computer keyboard.

- | | | |
|-----------------------|--------------------|------------------------|
| i) Space bar: | iv) Insert | vii) Num lock key. |
| ii) Caps lock: | v) Delete key | viii) Print screen key |
| iii) Escape (ESC) key | vi) Back space key | ix) Scroll Lock key |

3. Suggest **one** suitable input device for each of the following tasks:
 - a) To enter instructions in a command line user interface.
 - b) To move the pointer in a graphical user interface.
 - c) To input text or graphics from hard copies into electronic format.
 - d) To convert characters from graphic format back to editable text format.
 - e) To mark multiple-choice type answer sheets in an examination.
 - f) To process cheques in a bank.
 - g) To read the bar codes of products in a supermarket.
 - h) To record human voice into the computer.
- b) What is a computer pointing device?
- c) Describe any five operations of a mouse.
4. Give **two** advantages of using a digital camera over a traditional film camera.
5. What is a dumb terminal? Give **two** examples of a dumb terminal.
6. Give **two** advantages of an LCD monitor over a CRT monitor, and then give **two** Advantages of a CRT monitor over an LCD monitor.
7. Give **two** advantages and **two** disadvantages of display devices (e.g., a monitor).
 - b) Define the following terms
 - Resolution
 - Pixel
 - Refresh rate
8.
 - a) what is a printer?
 - b) With examples Distinguish between impact printers
 - c) Give **two** advantages of dot-matrix printers over laser printers.
9.
 - a) What is a peripheral?
 - b) Give any five components found inside the system unit/case
10. Describe briefly the functions of the control unit Inside the CPU.
- b). Describe briefly the **three** operations carried out in the arithmetic and logic unit?
11. What are registers? Describe briefly about **two** kinds of registers in the CPU.
- b). Describe briefly the **four** basic operations of the machine cycle in the control Unit.
12. How is bit different than byte? How many bytes are there in one megabyte (MB)?
- b) How is volatile memory different from non-volatile memory? Give **one** example for each of these memory types.
- c). Name **two** kinds of configuration information stored inside the CMOS on the Motherboard.

13. Give **two** reasons why secondary storage is necessary.
- b). with examples distinguish between a storage medium and a storage device
- c). Give **two** advantages and **two** disadvantages of using floppy disk.
- d) Explain the importance of the following in a computer
 - (i) Hard disk
 - (ii) RAM
 - (iii) BIOS chip
14.
 - (a). Distinguish between **hard** and **soft copy**.
 - (b). Give **two** advantages of keeping computer files in electronic form over print out.
15. Describe briefly the differences between CD-ROM, CD-RW.
 - A CD-ROM
 - A CD-RW
 - (b). Mention two devices that can be used both as input and output devices.
 - (c). State the difference between registers and buffers.
 - (d) Examples of display devices commonly used today;
 - (e) Describe any five communication hardware Network interface card/NIC

COMPUTER MANAGEMENT

1. Distinguish between a **file** and a **folder**.
2. Define the following as used in the file management system.
 - a) File path
 - b) File extension
 - c) File separator
3. Give any three file extensions for each of the following files
 - a) Image files
 - b) Video files
 - c) Executable files
4. Mention two importances of file extensions.
5. Using windows 7 operating system, outline the steps taken to create DOCUMENTS called **pre mock**.
6. Given the file path below;
C:\Users\Dave\Desktop\SEMINAR\S850 1.docx. Identify the following
 - a) Root directory.
 - b) Dave
 - c) Folder name.
 - d) File extension.
7. Define the term **booting** a computer.
8. Write the following in full and state one function of each in the booting process
 - (i) POST
 - (ii) BIOS

9. State any one way of recovering lost files on a computer.
10. Mr. Kato connected a flash disk and displayed as local disk G, it had his PowerPoint document named as exercise inside a folder named as Exam, which is also found inside a folder called Assignment. Write a complete file path for his document.

11. What are utilities?

12. State **one** effect of the following to a computer file:
- (i). File Compression utility.
 - (ii). Antivirus program.

SYSTEM SECURITY, ETHICAL ISSUES AND EMERGING TECHNOLOGIES

1. Briefly describe the concept of **computer ethics**.
2. State **three** unethical practices usually engaged in by ICT users.
3. Define the term, a **virus**?
4. Explain any four types of **viruses**?
5. How are **viruses** spread from one computer to another?
6. What is **Computer security**?
7. Differentiate between
 - a) Unauthorized access and unauthorized use?
 - b) Authentication and identification?
 - c) Software theft and software piracy?
8. Mention the four **methods** of authentication and identification.
9. a) How different is hardware **theft from hardware vandalism**?
10. What are the health problems associated with the prolonged use of computers?
11. Give two ways how can these problems be avoided?
 12. a) Explain the term intellectual property?
 - b) Explain the forms of intellectual property?
13. Mention any four applications of emerging technologies.

COMPUTER LAB CARE AND MAINTENANCE

1. a) Define the term Computer Maintenance.
b) Explain any two importance of *servicing computers*.
2. a) State one reason why computers need stable **power supply**?
b) Explain the **functions** of the following equipment in the computer laboratory.

(i) Air conditioner.	(iv) Blower
(ii) Woolen carpet.	(v) Screw driver.
(iii) Crimping tool.	
3. Mention any five **measures** to ensure safety of **users** in the lab.
4. Explain three ways of keeping computers safe in the computer lab.
5. Assuming that one of your friends has bought a computer set with the specifications below. As a student of computer studies help him/her to understand these specifications as you answer the questions that follow;
Specifications:
 - Intel(R) Core (TM) i5 M520 @ 2.40 GHz (4 CPUs)
 - 2 GB of DDR2 SDRAM
 - 500GB HDD, 7200 rpm
 - SuperMulti DVD+/-RW (+R DL) / DVD-RAM
 - 10/100/1000 Base-T network interface and 56K modem
 - Intel ® HD Graphics. 1280 X 800 (32 bit) LCD Display.
 - Lenovo model 25184HU.
 - Windows 7 Ultimate 64-bit (6.1, Build 7800)
 - Norton Internet Security (3 years subscription), Microsoft Works (OEM), NTI CD-Maker Gold (OEM), Acer Empowering Technology, Adobe Acrobat Reader 7, Microsoft Office 2007 Home and Student Edition (Trial), & Acer ArcadeLive.
 - a) State this computers processing speed
 - b) Describe what the DVD+/-RW will enable him do.
 - c) Provide evidence for this computer connectivity ability.
 - d) What do DDR and HD stand for in full?
 - e) How is your friend likely to benefit from LCD and HD display of his computer display?
 - f) State the name of the Operating system supplied with this computer system
 - g) Identify **one** utility and one application supplied by the above computer.
 - h) Convert the RAM capacity to megabytes.
6. Define the following terms as used in computers
 - (i) System specification
 - (ii) System configuration
 - (iii) System troubleshooting
 - (iv) Fine tuning.
7. Mention any function of the system **control panel**.
8. State any two risks to data.
9. Explain any two ways of securing data on a computer

End