# COMPUTER STUDIES STUDENTS DISCUSSION INTERNAL SEMINAR SCHEDULES JUNE -2019 QUESTIONS TO BE DISCUSSED BY STUDENTS INCLUDE

#### 1. Operating system

- d) What are the functions of an operating system to the computer
- d) Differentiate between DOS and WINDOWS.
- d) Explain the differences between GUI and CLI
- d) Windows operating system is widely used these days, why do you think windows has gained such grounds

#### 2. Programming languages

- a) Describe the types of programming languages, dividing them into low –level and high level languages.
- b) What is a machine code?
- c) Give the differences between the following programming languages
  - i) Machine language
  - ii) Assembly languages
  - iii) High level Languages
  - iv) Application packages
- d) What are the advantages and disadvantages of low level programming languages?
- e) What are the advantages of high level programming languages?

#### 3. Computer networks

- a) Define a LAN and discuss its advantages and disadvantages
- b) Define WAN and discuss its advantages and disadvantages
  - c) State and explain the three types of topologies, giving there advantages and disadvantages.
  - d) What is a net work topology?
- e) Explain the difference between peer –to peer and client server.

#### 4. **DATA TRANSMISION:**

a) What do you understand by the term data transmission?

- b) What is meant by transmission media?
- c) State two examples of transmission media used in a net work
- d) State reasons as to why fibre optics could be a better media than coaxial cables in transmitting data/information.

#### 5. MEMORY

- a) Describe the functions of memory in a computer system.
  - b) Describe the features of RAM and ROM
  - c) State where each of them is applicable
  - d) Explain the difference between volatile and non volatile
  - e) Explain the different types of volatile and non-volatile
  - a) Discus the reasons why computer is taught is schools
  - b) Computers have played vital role in

#### HISTORY AND COMPUTER GENERATIONS

- i) what does the term computer generations mean
- ii) Clearly state the characteristics of the different generations of computers (from the 1<sup>st</sup> to the 5<sup>th</sup> generations citing personalities devices and soft wares invented.
- iii) Before the invention of computes a number of devices were used to manage information.Name six computing devices that predate the computer.
- iv) Write short notes on the following: ENIAC, UNIAC, Mark 1
- v) Describe the mechanical era, electro mechanical era.

## ADVANTAGES AND DISADVANTAGES OF USING A COMPUTER AND HOW COMPUTERS ARE YSED UN DAILY LIFE.

- i) What is a computer?
- ii) compare with the aid of a diagram, the physical

- iii) Describe the IPOS Cycle
- iv) Bala exclaimed "Computer are useless in the education medical sector, advise him accordingly.

### CLASSIFICATION OF COMPUTERS, THE CENTRAL PROCESING UNIT (CPU) AND THE SYETEM UNIT.

- i) With examples, explain the difference between analog and digital computers
- ii) Explain the different categories of computers
- iii) What is the difference between the central processing unit and the system unit?
- iv) The central processing unit is the computer's main processing device
- v) Describe some of the components found in the system unit.

#### HARD WARE (INPUT/OUTPUT DEVICES)

- i) What is computer hard ware?
- ii) A computer system includes devices that are used to get information into the computer (input devices) and transfer information out of a computer in a form that is more useful to human (Output devices) and also devices used to store computer information (Secondary storage devices). List and describe some of today's common input, output and storage devices.
- iii) With use of examples describe the difference between impact printers and non impact printers.
- iv) What is a system? Explain the four elements that form a computer system.
- v) Describe what a serial and parallel port mean and which links to what external device.

#### SECONDARY AND PRIMARY MEMORY, STORAGE CAPACITIES (BIT, BYTE, KILO BYTE, MEGABYTE, GIGA BYTE)

- i) Differentiate between primary and secondary memory
- ii) RAM and ROM are two different types of memory found in the computer, describe the difference

- between RAM and Rom and how they differ from secondary storage.
- iii) Why is a computer's main memory system referred to as random access memory?
- iv) Compact disc ROM devices are now used to store games. State three advantages and disadvantages of supplying games on the above mentioned devices.

#### Another school

- v) Give 5 differences between hard and floppy disks
- vi) How do you save information onto a diskette?
- vii) Compare the two types diskettes used in terms of size, capacity, and whether they of low or high density.
- viii) Define the following terms BIT, BYTE, KILO BYTE, MEGABYTE, and GIGA BYTE.
- ix) How many bits are in the word boy?
- x) Convert the following to 512kb to mb, 12 bit and 64 bit data transfer?

#### Lab care

- i) What safety precautions do you take while using a diskette
- ii) Assuming you have been assigned the job of lab assistant in your school, explain how you would take care of this computer.

#### COMPUTER VIRUSES, BUGS SECURITY AND PRIVACY.

- i) What is a computer bug? What does it mean to debug a computer program?
- ii) What is a computer virus? How is it similar to a human virus?
- iii) Outline the common ways in which viruses are spread
- iv) State the symptoms of viruses.

#### ANOTHER SCHOOL

v) List some of the scanning soft ware

- vi) What are some of the methods used to protect computer systems and their data from computer virus?
- vii) Why is privacy an issue that arises with increased use of computers through our society?
- viii) What are some of the methods used to protect computer systems and their data from theft?
- ix) Differentiate between a hacker and a pirate

#### **SOFT WARE**

- i) What is computer soft ware?
- ii) Describe the following branches and give examples in each case.
  - a) System software
- b) System utilities.
- c) Soft ware development tools d) Application soft ware
  - e) Customized/ tailor-made software.
- iii) Describe the differences between machine language, assembly languages and high level languages.
- iii) Explain how the following translation soft ware work.
  - a) Compiler
- b) Interpreter

#### SYSTEM START UP AND CONFIGURATION

- i) What is meant by the following terms?
- a) Bootable/start up disk
- b) System

- configuration
  - c) Uninstallation

- d) Installation
- e) Trouble shooting
- f) Device drivers
- ii) List the different stage one would follow while
  - a) Installing an operating system like windows
  - b) Installing a program like ms office.

#### DOS AND WINDOWS

- i) What is an operating system?
- ii) Give 10 functions of an operating system
- iii) Name five types of operating system you know.

#### **ANOTHER SCHOOL**

iv) Give five differences between DOS and Windows

- v) Explain the following: b) List Box a) File icon c) Control panel d) Screen saver e) Pop up menu f) Windows g) Toggle button What is a pass word? vi) What are the differences between character -based vi) interfaces and graphical -user interfaces? Give examples of each **NET WORKS** Briefly explain these terms i) a) Networking b) MAN c) Intranet d) Full duplex f) Internet g) Synchronous e) LAN ANOTHER SCHOOL What is network topology? Describe 4 types of net ii) work topologies What is the difference between peer-to- peer net iii) work and client server net work? Discuss the advantages and disadvantages of net iv) working over stand alone computers. List the stages you would follow while adding a v) standalone computer to a net work group of ndeijeNet. vi) Differentiate between work group and domain
- INTERNET
  - i) What is internet?
  - ii) List and explain some of the services offered by the internet.
  - iii) Define the following terms?
    - a) E-mail b) Surfing c) URL d) USENET e) HTML
    - f) HUB g) Search engine h) TCP/IP i) HTTP
    - j) Protocol k) FTP l) I.S.P
  - iv) Describe the disadvantages of the internet.

- v) What is a web browser?
- vii) Explain the use of the following on an e-mail
  - a) To
- b) Bcc
- c) Compose

- d) Sign in
  - e) Sign up f) Cc g) Subject

h)

Send

- i) Sign out.
- viii) State one difference that distinguish the dial up internet connectivity from the

wire connectivity.

#### WEB DESIGNING AND HTML

- what do you understand by the term worldwide web i) (www)
- Describe the differences between the www and ii) internet
- iii) What is meant by the terms
  - a) HTML b) Web page c) Web master d) Hyper link
  - e) Web site f) Web server h) Web browser i) Hyper text

#### ANOTHER SCHOOL

- iv) What is web publishing
- Describe the steps taken when designing a web v) page
- State 5 advantages of web publishing vi)
- Describe how a webpage is a source of information. vii)
- viii) What is the difference between www and the web page
- What are the functions of the web page ix) components?
  - a) Page title
- b) Home page c) Refresh button
  - d) Icons e) Hyper links

#### CHARACTERISTICS AND DIFFERENCES OF DIFFERENT APPLICATIONS PROGRAMS

- a) Define the following terms citing 3 examples
  - Word processing
- Spread sheets-

Presentation

- Web publishing
- Desktop publishing

- Computer aided Design Data base
- b) State 4 uses on each of the above application programs.
- c) Define the following
  - Data base Table Form - SOL
  - Relative data base - Field - Data

type

- DBMS - Query - Report
- Record Constraints - Flat file
- Data type

#### **BOOTING PROCESS**

- a) Define the term booting"
- b) What is the difference between "Warm booting" and cold booting
- c) Briefly explain the process a computer goes through while booting

#### **PROGRAMING**

- a) What is meant by the term computer programming
- b) Write short notes on the following programming terms

  - i) Artificial languages ii) Pseudo code iii) Function
  - iii) Algorithms
- iv) Boolean Logic v) Syntax

- vi) Expression
- vii) Operand
- c) Briefly explain the different data types used in programming languages
- d) What is meant by the term system analysis
- e) Describe the different stages of system analysis.

**END**