



MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2016/2017

**FIRST YEAR FIRST SEMESTER EXAMINATIONS FOR THE
SCHOOL OF PUBLIC HEALTH, DEVELOPMENT STUDIES,
AGRICULTURE & FOOD SECURITY AND SCHOOL OF ARTS
WITH INFORMATION TECHNOLOGY**

MAIN CAMPUS – GROUP 1

UCI 101: FOUNDATIONS OF INFORMATION TECHNOLOGY

Date: 28th November, 2016

Time: 8.30 - 11.30 am

INSTRUCTIONS:

- Answer question ONE and any other TWO questions.



QUESTION 1 (Compulsory, 30 Marks)

- i. The basic operations performed by a computer are:
A) Arithmetic operation B) Logical operation C) Storage and relative D) All the above
- ii. Microprocessors as switching devices are for which generation computers
A) First Generation B) Second Generation C) Third Generation D) Fourth Generation
- iii. The brain of any computer system is
A) ALU B) Memory C) Control unit D) CPU
- iv. The two kinds of main memory are:
A) Primary and secondary B) Random and sequential C) A and B D) ROM and RAM
- v. To produce high quality graphics (hardcopy) in color, you would want to use a/n
A) RGB monitor B) Laser printer C) Ink-jet printer D) Plotter
- vi. One millisecond is
A) 1 second B) 10^{th} of a seconds C) 10000^{th} of a seconds D) 1000^{th} of a seconds
- vii. The output quality of a printer is measured by
A) Dot per sq. inch B) Density per inch C) Dots printed per unit time D) Dot per inch
- viii. Which of the following is not an input device?
A) OCR B) Optical scanners C) Voice recognition device D) COM (Computer Output to Microfilm)
- ix. Regarding a VDU, which statement is more correct?
A) It is an output device B) It is an input device C) It is hardware item D) It is a peripheral device
- x. Which of the following produces the best quality graphics reproduction?
A) Laser printer B) Ink jet printer C) Dot matrix printer D) Plotter
- xi. Which of the following is not processing?
A) arranging B) manipulating C) calculating D) gathering
- xii. Software in computer
A) Reduces the capabilities of the hardware B) Increases the speed of central processing unit C) Does not interact with the hardware D) Enhances the capabilities of the hardware
- xiii. The arranging of data in a logical sequence is called
A) Summarizing B) Classifying C) Reproducing D) Sorting
- xiv. Instructions and memory address are represented by
A) Character code B) Parity bit C) Binary word D) Binary codes
- xv. Which generation of computer is still under development
A) Second Generation B) Third Generation C) Fourth Generation D) Fifth Generation
- xvi. Each set of Napier's bones consisted of _____ rods.
A) 3 B) 5 C) 9 D) 11
- xvii. Properly arranged data is called
A) Field B) Words C) File D) Information
- xviii. An integrated circuit is
A) A complicated circuit B) An integrating device C) Much costlier than a single transistor D) Fabricated on a tiny silicon chip
- xix. The term gigabyte refers to
A) 1024 bytes B) 1024 kilobytes C) 1024 petabytes D) 1024 megabytes
- xx. A byte consists of
A) One bit B) Four bits C) Sixteen bits D) Eight bits

- xxi. Which of the following memory medium is not used as main memory system?
A) Magnetic core B) Semiconductor C) Magnetic tape and semiconductor D) Magnetic tape
- xxii. _____ computers are also called personal computers
A) Mainframe Computer B) Mini Computers C) Super Computers D) Micro Computers
- xxiii. Which one is the largest space?
A) kilobyte B) gigabyte C) terabyte D) petabyte
- xxiv. The BIOS is the abbreviation of _____.
A) Base Input Output System B) Best Input Output System C) Basic Input Output Symbol
D) Basic Input Output System
- xxv. Operating system, editors, and debuggers comes under?
A) Custom Software B) Application Software C) Utility Software D) None of the above
- xxvi. The earliest calculating devices are
A) Stepped Reckoner B) Clock C) Difference Engine D) Abacus
- xxvii. Which unit converts computer data into human readable form?
A) Control Unit B) ALU C) Input unit D) Output unit
- xxviii. The full form of ALU is
A) Asymmetric Logic Unit B) Array Logic Unit C) Application Logic Unit D) None of above
- xxix. What produces useful information out of data?
A) Computer B) CPU C) Programming D) Processing
- xxx. The term GIGO relates to which characteristics of computers?
A) Speed B) Automation C) Reliability D) Accuracy

SECTION B

QUESTION 2

- i. List and describe the five components of a computer (5 Marks)
- ii. How Is System Software Different from Application Software? (5 Marks)
- iii. What are the advantages and disadvantages that users experience when working with Computers? (5 Marks)
- iv. What is the purpose of an IP address, and what is its relationship to a domain name? (5 Marks)

QUESTION 3

- i. Name five categories of computer users (5 Marks)
- ii. Name any five embedded systems (5 Marks)
- iii. State and explain any five functions of an operating system (10 Marks)

QUESTION 4

- i. Name any three modern desktop operating systems (3 Marks)
- ii. Differentiate between Data and Information (2 Marks)
- iii. Using a diagram, explain the functional organization of computer hardware systems (10 marks)
- iv. What is the role of each element in an Information System? (5 Marks)

QUESTION 5

- i. What is a bit, and how does a series of bits represent data? (5 Marks)
- ii. Give any five qualities of valuable information (10 Marks)
- iii. How does society use computers in Education, Finance, Government, Health Care, Science, Publishing, Travel, and Manufacturing? (5 Marks)