ALLAMA IQBAL OPEN UNIVERSITY, ISLAMABAD
(Department of Computer Science)

WARNING

1. **PLAGIARISM OR HIRING OF GHOST WRITER(S) FOR SOLVING THE ASSIGNMENT(S) WILL DEBAR THE STUDENT FROM AWARD OF DEGREE/CERTIFICATE, IF FOUND AT ANY STAGE.**
2. **SUBMITTING ASSIGNMENTS BORROWED OR STOLEN FROM OTHER(S) AS ONE'S OWN WILL BE PENALIZED AS DEFINED IN "AIOU PLAGIARISM POLICY".**

Course: Introduction to Computer Concepts (3422)

Level: MBA-IT   **Semester: Spring, 2014**
Total Marks: 100   **Pass Marks: 40**

ASSIGNMENT No. 1
(Units 1-4)

Note: All questions are compulsory. Each question carries equal marks.

Q.1 a) Explain main categories of optical laser disks. Describe at least two applications where rewritable optical laser disks would be preferred over hard disks for storage.
     b) Differentiate between SDRAM technology and nonvolatile memory technology.

Q.2 a) What do you mean by a programming language? What are the main types of programming languages? Discuss at least three languages in detail.
     b) What do you mean by a computer virus? What are the main types of computer viruses that harm software and hardware?

Q.3 a) Compare the information processing capabilities of human beings to those of computers with respect to speed, accuracy, reliability, consistency and memory capability.
     b) What is the relationship between the operating system, system software and application software? What are their main objectives?

Q.4 a) What do you know about ASCII, Extended ASCII and ANSI encoding schemes? What are their major characteristics?
     b) What is the major difference between Serial and Parallel data transmission? Explain with the help of diagram.

Q.5 a) Write note on computer buses available on the motherboard of general purpose PC system.

b) For a given computer, which type of memory would have the greatest capacity to store data and programs: Cache or RAM? RAM or Registers? Registers or Cache?

ASSIGNMENT No. 2
(Units 5-8)

Total Marks: 100 **Pass Marks: 40**

Note: All questions are compulsory. Each question carries equal marks.

Q.1 a) Describe the function of word processing software.

b) What are the frequently used word processing features? Explain how they are different from older versions.

Q.2 a) Explain with the help of a diagram the four basic steps involved in speech recognition.

b) What is the meant by windows? Differentiate windows and non-windows applications. What are the three types of windows?

Q.3 a) What do you mean by point and draw devices? List and describe them briefly.

b) Which type of OCR scanner is designed to read documents of varying sizes?

Q.4 a) Give examples of the three types of entries that can be made in a spreadsheet.

b) Give an example of each of the four types of ranges.

Q.5 a) All commercial spreadsheet packages manipulate row and columns of data in a similar manner. What makes one spreadsheet package more desirable than another?

b) Define relationship between a field, a record and the structure of a database.

3576 (Old 3422) Introduction of Computer concepts

Book Recommended: Computers, by Larry Long, Nancy Lang, 6th Edition

Course Outline:

Unit 1   Computers and Processors
    a)   Definition, Characteristics, History and Types of Computer
    b)   Computer Organization

Unit 2   Bus, processor, and Pc Platform
    a)   Bus, Port, Pc Platforms
    b)   The Processor Characteristics (Word Size, Processor Speed, Ram Capacity)

Unit 3   Basics of Digital Computer
    a)   Number System, Basics of Logic Gates
    b)   Basics of Boolean Algebra

Unit 4   Data Processing, Storage, and I-O Devices
    a)   Data Processing Techniques
    b)   Data Storage (Bit, Byte, Ram, Rom, Cache Memory, and Secondary Storage)
    c)   Input Devices
        1.   Keyboard and its types, Point and Draw Devices
        2.   Scanner, Digital Camera, Speech Recognition System and Multimedia
    d)   Output Devices
        1.   Monitor (Graphic Adopter, Size, Resolution and Types of Monitors)
        2.   Printers and Types (Dot Matrix, Ink Jet, and Laser), Plotter (Raster & Pen)
        3.   Presentation Graphics and Special Function Terminal (ATMs, POSS)

Unit 5   Software
    a)   Types of Software, Windows Introduction, Understanding Windows Help
    b)   The Desktop, Types of Windows (Application, Document, and Dialog)
    c)   Elements of an Application Windows
    d)   Understanding Folders, Copying, Deleting, and Moving Files

Unit 6 **Programming Concepts**
   a)   Programming Languages, Main Components of Program
   b)   Simple Program Construction, Program Exercises in any High Level Language

Unit 7 **Word Processing (Ms Word)**
   a)   Basic Concepts and Features, Creating, Saving, Editing, Formatting
   b)   Printing Documents, Working on Multiple Documents

Unit 8 **Electronic Spreadsheet (Ms Excel)**
   a)   Basic Concepts and Features, Creating, Saving Excel Sheet, Editing The Sheet
   b)   Managing Formula, Formatting and Printing the Sheet, Working on Workbook

Unit 9 **Basics of Internet Usage**
   a)   Introduction, World Wide Web and Web Sites
   b)   Introduction to Internet Based Services, and Use of Email