

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) Semester: Spring, 2013
Level: MBA-IT 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) Compare the information processing capabilities of human beings to those of computers with respect to speed, accuracy, reliability, consistency, and memory capability.
- (b) What do you mean by a computer virus? What are the main types of computer viruses that harm software and hardware?
- 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 is the relationship between the operating system, system software, and application software? What are their main objectives?
- Q. 3 (a) What are the three 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) What is the basic difference between SDRAM technology and nonvolatile memory technology?

- 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) Discuss some 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) 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. 2 (a) Explain with the help of a diagram the four basic steps involved in speech recognition.
- (b) What is meant by windows? Differentiate windows and non-windows applications? What are the three types of windows?
- Q. 3 (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. 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 rows and columns of data in a similar manner. What makes one spreadsheet package more desirable than another?
- (b) What is the relationship between a field, a record, and the structure of a database?

Introduction to Computer Concepts (3422)

Credit Hours: 03

Book Recommended:

Computers, By Larry Long, Nancy Lang, 6th Edition

Course Outlines:

Unit-1: Computers and Processors

- a) Definition, Characteristics and 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
 - i) Keyboard and Its Types, Point and Draw Devices
 - ii) Scanner, Digital Camera, Speech Recognition System and Multimedia
- d) Output Devices
 - i) Monitor (Graphic Adopter, Size, Resolution and Types of Monitors)
 - ii) Printers and Types (Dot Matrix, Ink Jet, and Laser), Plotter (Raster & Pen)
 - iii) 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

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