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: IT Applications (360)

Level: HSSC

Semester: Spring, 2014

Total Marks: 100

Pass Marks: 40

ASSIGNMENT No. 1

Note: All questions carry equal marks. Please attempt in English or Urdu.

- Q. 1 Explain the concept of Information Technology. Describe the uses of Information Technology with the help of examples.
- Q. 2 What are the functions of Central Processing Unit? Also explain the input and output devices in detail.
- Q. 3 Differentiate between System Software and Application Software. Give examples to support your answer.
- Q. 4 What is meant by Bus? What are the functions of Bus in a computer system?
- Q. 5 What is meant by Operating System? Also explain the main functions of an Operating System.

ASSIGNMENT No. 2

- Q. 1 Define the term spreadsheet. Explain it in detail with the help of at least two suitable examples.
- Q. 2 Explain the term "Data Communication"? Differentiate between Asynchronous and Synchronous Transmission.
- Q. 3 Briefly explain the concept of Computer Networks? Differentiate between Local Area and Wide Area Network.
- Q. 4 a) What is meant by Word Processor? Explain it in detail with the help of suitable examples.
 - b) Write a short note on Copyright issues in Pakistan.
- Q. 5 Write short notes on the following terms:
 - i) Electronic-Mail (E-mail) ii) Computer Crime
 - iii) Internet iv) Data Protection and Privacy Issues

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Course Code: 360

Course Title: IT Applications (HSSC Level)
Credit Hours: 3 (3+0) 3 Hours study per week
Session Offered: Please see the offering schedule

Recommended Book: Computer Science Text Book for Class XI by Sajjad

Heder, National Book Foundation

Audio/Video/Multimedia CD: Under Process

Reference Book: Computer Fundamentals by P.K. Sinha, Fifth Edition

Pre-Requisite: N/A

Course Coordinator: Department of Computer Science, AIOU

Teaching Methodology: Distance Learning/Online **Computer Usage:** As per requirements

Introduction:

This main theme of the course is to prepare students to understand the fundamental concepts of IT. The course has been designed to give an overview of computer, its components, and applications. The course also covers basics of data communication, networking, internet and World Wide Web. The application of IT using Word Processor and Spreadsheet is also covered.

Course Objectives:

At the end of the course you are expected to be able to:

- 1. Understand basic concept of IT
- 2. Understand functions and applications of Hardware and Software
- 3. Identify Input and Output Devices
- 4. Understand different terms and applications associated with communications and networking
- 5. Understand different terms associated with the Internet and World Wide Web.
- 6. Familiar with word processing and spreadsheets application tools
- 7. Use various web tools including Web Browsers, E-mail clients and search utilities.
- 8. Understand concepts of data protection and copyright in IT applications

Evaluation Criteria:

i) Assignments 30%ii) Final Examination 70%

Course Outlines:

Unit-1: Basic Concepts of Information Technology

Introduction to Information Technology (IT), Brief History, IT Application examples and uses

Unit-2: Computer Hardware and Software

Central Processing Unit (Arithmetic Logic Unit, Control Unit), Main Memory, Storage, Buses and Registers, System Software, Application Software

Unit-3: Input and Output Devices

a) Input Devices

Keyboard, Mouse, Character Recognition Devices, Microphone, Video Camera and Scanners

b) Output Devices

Monitor (Graphic Adopter, Size, Resolution, and Types of Monitors), Printers and Types (Dot Matrix, Ink Jet, and Laser), Plotters

Unit-4: Operating System

Operating Systems Introduction, Main Functions, Introduction to Windows Important Features of Windows, The Windows Desktop and Task Bar, Working with My Computer, Rules for Files and Folder Names, Selecting, Remaining and Deleting Files and Folders, Copying and Moving Files and Folders, using Recycle Bin, Dealing with disks in Windows, Exploring Windows Explorer, Copying and Moving Items in Explorer, Finding Files in windows, Getting Help, customizing windows, Shutting Down or Restarting Windows, Setting up Printer.

Unit-5: Data Communication and Networking

Introduction to Data Communication, Data Communication Modes, Asynchronous and Synchronous Transmission, Communication Media, Communication Speed Introduction to Computer networks, Peer to peer Networks, Networking Software, Local Area and Wide Area Network, Application of Networks, Network Topologies

Unit-6: IT Applications I (Word Processor)

Introduction to Word Processor, Working in Documents, Saving a Document, Getting Help, Opening a New Document, Opening an Existing document, Recently opened files, Opening from the Documents Menu, Exporting and Importing Files, Choosing Page Size and Orientation, Setting Margins, Inserting Page Number, Header and Footer, Footnote and Endnote, Preview and Print a Document, Copying and Moving Text, Bold, Italics, Underline, Inserting Tables

Unit-7: IT Applications II (Spreadsheet Software)

Introduction to Spreadsheets, Creating Worksheet, Entering Data, Check Spelling, Selecting Cells, Quick Data Entry, Changing column width, and Row Height, Changing Font, Size and Style, Alignment of Text, Wrapping of Text, Adding a Formula in Cell, Inserting Rows and columns, Hide and Unhide, Sorting, filtering of Data, Adding Subtotals, Chart, Move, Resize and Delete the Chart

Unit-8: IT Applications III (Internet Browsing and Electronic Mail)

Introduction to Internet, Internet Addresses, Browsing the Web, Searching for Sites, Downloading and Installing Software, Sending and Reading E-mail, Composing an Email Message, Working with Address Book, Automatically

Add Contents to Your Address Book, Reading a Message, Checking for New Messages, Reading File Attachment, Taking Acting on a Message, Web Based Email, Advantage of Using Web Based Email.

Unit-9: IT Applications IV (Data Protection and Copyright)

Data, Organizing Records, Backup, Viruses and Anti-Virus Issues, Data Protection and Privacy Issues, Copyright, Computer Crime.

Activities:

- 1. Explain the Concept of Information Technology
- 2. List down the characteristics of computer
- 3. List the hardware components of a computer and their organization.
- 4. Explore the features of Windows OS
- 5. Explain the modes of data transmission and devices used in networking.
- 6. Develop your CV in Microsoft Word
- 7. Create Result card in Microsoft Excel. Using AIOU grading scheme
- 8. Submit a 3-4 page report on the usefulness and characteristics of IT in the field of science.

Note: These are sample activities. Tutor may assign additional activities during the course.

Prepared by: Concerned Department

Last Revised: 2011

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