W.E.F. 2016-17

B.COM. / B.A. / B.Sc - COMPUTER APPLICATIONS I YEAR - SEMESTER -I

DSC3A: FUNDAMENTALS OF COMPUTERS

UNIT I

Exploring Computers and Their Users:

An Overview of Computer System: Define Computer- Computers for Individual Users – Computer for organizations- Importance of computers.

Inside the Computer System

Describe the Machine- Parts of a Computer System – Hardware, Software, Data, Users – Information Processing cycle – essential Computer Hardware – Processing Devices- Memory Devices- Input/Output Device- System software – application Software.

UNIT II

Input Devices: The Keyboard, The mouse, The track ball, Scanner. Output Devices: Monitors – CRT monitors, Flat Panel Monitors; PC projectors Sound Systems – Audio & Video devices (Multi-Media Device); Hard copy devices – Dot matrix printers, Ink Jet Printers, Laser Printers, Plotters.

UNIT III

Processing Data: How Computer process data- Data representation, and Data processing in a computer .**Modern CPU's**: Microcomputer Processors- Intel, AMD, Freescale, IBM processors-Types of Processors- RISC Processors - Connecting computer to other devices – The Bus, Serial and Parallel ports, SCSI, MIDI, and other specialized expansion ports, Expansion slots and boards.

UNIT IV

Storing Information in a Computer: Magnetic Disks – hard disk, Floppy disk, Optical Storage devices – CDROM, DVD ROM, CD – Recordable, CD – Rewritable.

UNIT V

How to Build a Computer: Knowing Computer Hardware Parts – Cataloging and purchasing the parts – Assembling the System –The first Boot –Installing Software – Maintenance of Computer.

TEXT BOOKS:

- 1. Peter Norton , Introduction to Computers , 6^{th} Edition , Tata McGraw Hill , 2008.
- 2. Jacob Beckerman, How to Build a Computer 2014-15: Learn, Select Parts, Assemble, and Install: A Step by Step Guide to Your First Homebuilt.

REFERENCE BOOKS:

- 1. Leon A and Leon M, Computers for Everyone, Leon Vikas, 2001.
- 2. Turban E, Rainer R K, and Potter R E, Introduction to Information Technology, John Wiley & Sons, 2000.

MODEL QUESTION PAPER I B.Com. / B.A. / B.Sc., Computer Applications

SEMESTER - I

DSC 3A: FUNDAMENTALS OF COMPUTERS

Time: 3 Hours Max. Marks: 75

Section A

Answer any **Five** of the following Questions

 $(5 \times 3 = 15 \text{ Marks})$

- 1. (a) Applications of computer
 - (b) Any three Characteristics of Computer
 - (c) Memory cards
 - (d) Processor
 - (e) GUI
 - (f) Serial Bus
 - (g) PCI cards
 - (h) Processing Data
 - (i) RAM
 - (j) Flash memory

Section - B

Answer any ONE Question from each unit.

 $(5 \times 12 = 60 \text{ marks})$

UNIT I

- 2. Define computer and explain the Organization of computer?
- 3. Explain about parts of the computer?

UNIT - II

- 4. Explain about keyboard and pointing devices.
- 5. Explain output devices CRT monitors and Printers.

UNIT - III

- 6. Explain Data processing and how the data is represented in computer?
- 7. Explain different types of memory?

UNIT - IV

- 8. Explain about Magnetic storage devices.
- 9. Explain Optical storage devices and USB Flash devices?

UNIT - V

- 10. What is booting? Explain deferent steps for assembling computer.
- 11. What are the parts are needed to build a computer? Explain.