

# TRIPURA UNIVERSITY

(A Central University)
Suryamaninagar-799022

Syllabus

OF

Computer Skills FNDC-V

Semester - IV

#### Syllabus

## Computer Foundation

#### (FNDC-V)

Full marks: 100

Credits: 5

Introduction: introduction to computer system, Characteristics of Computers, Uses of computers, Types and generations of Computers, Basic Applications of Computer.

Data Representation: Number systems and character representation, decimal, binary, Octal and hexadecimal system, conversion from one number system to another number system, binary arithmetic (addition, subtraction using 1's complement & 2's complement, multiplication).

Representation of data/Information concepts of data processing,

Definition of Information and data, Basic data types, Storage of data/Information as files

Human Computer Interface: Types of software, Operating system as user interface, utility programs.

Devices: Input and output devices (with connections and practical demo), keyboard, mouse, joystick, scanner, OCR, OMR, bar code reader, web camera, monitor, printer, plotter

Memory: Primary, secondary, auxiliary memory, RAM, ROM, cache memory, hard disks, optical disks

Use of Computers in Education and Research: Data analysis, Heterogeneous storage, e-Library, Google Scholar, Domain specific packages such as office, SPSS, Mathematica etc.

## Reference Books:

- 1. A. Goel, Computer Fundamentals, Pearson Education, 2010.
- 2. P. Aksoy, L. DeNardis, Introduction to Information Technology, Cengage Learning, 2006
- 3. P. K.Sinha, P. Sinha, Fundamentals of Computers, BPB Publishers, 2007