

## COMPUTER APPLICATION

TH-4

Periods/Week-05

Total periods- 75

Examination- 03hrs

TH-80 IA-20

### Topic wise Distribution of periods

Sl. No.	Topic	No. of periods
1	Computer Organisation	15
2	Software concepts	15
3	Introduction to Internet	10
4	Problem Solving Methodology	05
5	Overview of C Program	15
6	Arrays & Pointer	15
	Total	75

### **Objective:**

The students will get to know about the generation of computers and their development. They will be made acquainted with various operating systems. A brief knowledge about Internet is necessary. The students will be given a brief knowledge about Programming methodology and a detailed in depth knowledge on C programming which is essential.

- 1. Computer Organisation** **15 periods**
  - Evolution of Computers
  - Generation of Computers
  - Classification of Computers
  - Computer architecture
  - Functional block diagram of Computer
  - Input devices ,CPU, Output devices
  - Different types of Memories and their classifications
- 2. Software concepts** **15 periods**
  - Software concept
  - System Software ,
  - Application Software
  - Overview of Operating System , objectives, functions,
  - Different Types of operating system
  - Features of DOS, Windows, & Unix
  - Programming languages
  - Compiler, interpreter
  - Computer Virus
  - Detection and Prevention of Virus
  - Application of computers in different domains.
- 3. Introduction to Internet** **10 periods**
  - Networking concept.
  - Application of Internet in different domain like – education, entertainment, business, office
  - e-mail message format
  - Sending & receiving e-mail (one – to one & one to many)

- Different types of internet connectivity
- 4. Problem Solving Methodology** **5 periods**
- Algorithm
  - Pseudocode
  - Flowchart
  - Examples of Problem solving through Flowchart
- 5. Overview of C Program** **15 periods**
- Constants, Variables & data types.
  - Managing input & Output operations
  - Operators & Expression
  - Decision Making & Branching (If, Switch, Goto, While, Do , For statements)
- 6. Arrays & Pointer** **15 periods**
- 1 Dimensional, 2 Dimensional Array
  - Character arrays & Strings
  - Function in C
  - Recursions
  - Passing array to function & strings to functions.
  - Pointer , Structure, Union ( concept only no programming).

**Reference Books :**

- 1.0 Computing Fundamentals & C Programming : By: E. Balagurusami (TMH)
- 2.0 Programming In ANSI C : By : A.N.Kamthane (Pearson Education)
- 3.0 Let us C : By : Y Kanetkar (BPB)
- 4.0 Computer Fundamentals By; D.P.Nagpal, S.Chand
- 5.0 Comdex Computer Course Kit By : Vikas Gupta, Dreamtech – 1 (For Practical)
- 6.0 Introduction to computer with MS-Office , TMH (For Practical)