

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT

M.Sc. Biotechnology (Five years integrated course)

Semester - II

IBT: 202

Course Title: Basics of Computers

Unit – I (7 hrs.)

1. Introduction to computers: Overview to computers and historical perspective, software and hardware, operating system, network types and architecture.
2. Concept of Unix- utilities and programming tools, commands and operation of Unix environment
3. Structure and function of servers, multiple OS, data storage devices

Unit –II (7hrs.)

4. Internet: introduction to internet applications, online services, communication types, WWW, HTML, web browser, search engines, static and dynamic web pages, data bases, literature search.
5. Introduction to programming: Concept of algorithm, flow chart, structure of programme, compilers.

Unit –III (7 hrs.)

6. Programming in C: Constants, variables and key words in C, data types, operators, control structure, UDF, Array concept, strings, structure, file handling.

Unit –IV (7 hrs.)

7. Data structure through C- basic concept of data representation, array and structure. Stack, queue, tree, graphs, sorting, of elements in array, searching of elements in array.

Unit –V (7 hrs.)

8. Database management system: Overview of RDMS, Advantages of RDMS over DBMS, normalization, Oracle data types. Introduction to SQL,DDL,DML, & TCL commands, data definition language, data manipulation language

Unit – VI (7 hrs.)

9. Set operators and function: Operators in SQL, set operators, joins- kind of joins, table aliases, sub queries, multiple and correlated sub queries, functions-single, group functions. Constraints, locks & table partitions, constraints-domain, views, partition view