Credits: 4

# SEMSTER IV

# Course XX

# Elective V Gore V - Informatics

Contact Hrs 90

#### **AIM OF THE COURSE:**

To create an overall general awareness about scope of the field of IT and to impart basic personal computingskills.

To create background knowledge for the various courses in the programme.

#### **OBJECTIVES OF THE COURSE:**

To introduce the basic terminology in the field of IT

To impart functional knowledge about PC hardware, operations and concepts

To impart functional knowledge in the use of GUI Operating System

To impart functional knowledge in a standard office package (word processor, spread sheet and presentation softwares) and popular utilities

To impart functional knowledge about networks and internet.

To give an overview of computer application in various fields and an overall generic awareness about the scope of the field of IT

#### **COURSES OUTLINE:**

## Module I: Introduction to programming:

Algorithm & Flow charts: Definitions, symbols used to draw flowcharts, Examples. High-level and Low-level Languages, Generations of Programming Language, Language translators: Assemblers, Compilers, Interpreters (Only concept and differences), Editor, Program Writing Structure of the Program, top-down design, Source code, Object code, Executable file, Extensions of different files, Program Compilation, Running of a Program; Header file concept.

### Module II: Introduction Data Base & Computer Networks:

Evolution of data base systems, overview of database management systems, Relational data model. Connecting computers, Requirements for a network, Server, Workstation, Hub/switch, Network interface card, network operating systems; Internet: brief history, World Wide Web, Websites, URL, browsers, search engines, search tips.