

शास्त्री द्वितीयवर्षम्
सप्तमपत्रम् – सङ्गणकविज्ञानम्
पठ्यक्रमनिष्पत्तयः

Shastri 3rd Semester.

Syllabus: Internet Technology and Protocols, File transfer protocols and RDBMS with foxpro.

Introduction to the Syllabus:

This semester's syllabus is a combination of Internet Concepts and Database concept studied in previous semester. Today, everybody knows how to handle internet. But, much of them don't know how actually the internetwork, how data is communicated and exchanged between devices. The syllabus of this semester aims to provide basic foundations to the basic concepts that are to be known about internet and its sub topics. Also, some chapters related to foxpro are there which is a continuation to previous semester chapter. At the end of this semester students will be able to understand following topics.

- ✓ Student will learn basics of about what is a network, how internet works, LAN Topologies, Information communication etc.,
- ✓ Student will get Theoretical knowledge about the information flow from one computer to another across the Internet/ Network
- ✓ IP address concept, DNS gives a brief knowledge about the data communication which is common today.
- ✓ Client-Server architecture design concepts gives introduction about how websites works, how server based applications like Gmail facebook etc works.
- ✓ FTP chapter explains how files will be transmitted across internet/ network. Everybody knows how to transfer files between mobiles using WiFi hotspot. This concept explains theoretical Ides behind this concept.
- ✓ The concept of RDBMS elaborates the idea of DBMS learnt in last session. In continuation, here student will get knowledge about Queries, precisely about SQL. The applicability of SQL gives the independence of Database package installed. Joins and relations explain how to fetch data from more than one table. Overall, the whole concept depicts how database can be handled, how information can be stored.
- ✓ Visual FoxPro Utilities explorer's next possibility of Visual Foxpro apart from Database. Here student will learn about the programming interface of Visual FoxPro. The foundation about theoretical concepts of initial programming starts from here. Also, some basic programmes related to foxpro can be learnt here.
- ✓ Also, student will learn some general practices followed while writing a program, efficient code to program.

Shastri 4th Semester.

Syllabus: Problem Solving and Programming using C language.

Introduction to the Syllabus:

Programming is one of the wide are in computer industry. It explores ones knowledge about problem solving using computer and using different programming languages. This semester introduces the student to one such

Programming language C which is treated as evergreen programming language. Learning Programming with C is a fun and it makes the student to think to implement a logic to solve a problem.

- ✓ In this session, student will learn C Programming which is treated as beginner level introduction to whole programming languages. The evolution C from beginning stage of programming, challenges faced to invent it, stages involved, its uniqueness etc., will be discussed here.
- ✓ The programming elements like looping, branching etc are studied and practiced using various programs.
- ✓ The knowledge about the programming is provided through Simple programmes to introduce the student to programming world so that he can understand any other programming languages easily.
- ✓ The syllabus explores the minute details to be remembered in programming. So, students can combine Web concepts discussed earlier with programming techniques to practice new possibilities.
- ✓ Student can get information about Theoretical practices like Documentation, Top Down Approach, Bottom Up Approach, Structure oriented, Object oriented languages etc,