# HP Board of School Education Dharamshala

# <u>Syllabus</u>

**Subject: Computer Science**                                    **Class: 10+2**

## Marks

## UNIT - I
### Network Operating System
Basic network concepts, Overview and History of Linux, Linux Kernel, Linux Resources, Advantages of Linux, Creating and Viewing Files, Basic shell concept, shell commands, I/O redirection, pipelines, vi editor, Linux File System, manage files using shell, Cyber Laws.

## Unit II
### Network Operating System Administration (Configuration & Maintenance)
Hardware and Network Operating System Maintenance, Network Security and IT Career opportunities, Window NT & it's advantages, Difference between Linux and Windows NT,  Linux firewall and it's types, Managing Storage Devices Understanding basic disk concepts and manage system disks, logical volume concepts and managing logical columns, manage file system attributes and swap space, Mount point view, Introduction to shell Scripting. Administering User Accounts using GUI tool and Command Line.

## Unit III
### Desktop Publishing (Advanced)
Introduction to CorelDraw, Various components of CorelDraw window, Tools in CorelDraw, Creating Graphics & saving files, Importing images of various graphic formats and editing them, Designing logos, Greeting Cards etc. Hands on with CorelDraw.

## Unit IV
### Elementary Server side Scripting through PHP
Dreamweaver, XHTML, Difference between XHTML and HTML, Fundamentals of PHP, it's advantages, Variables, Data Types, Operators, scope of variable, Control Program Flow (Decision statement and Looping statements), arrays, functions, working with applications submitting forms, get/post methods,. Date/time session variables.

# Unit V

## RDBMS Concepts and MYSQL

Basic of database systems, Problems in Traditional file oriented approach, Three level architecture of DBMS, Roles of DBA, Data Dictionary, Advantages and Disadvantages of RDBMS, Constraints: Domain level constraints, Referential Constraints, SQL Statements: DDL Statements, DML Statements, DCL Statements, TCL Statements, Concept of Keys, Constraints on Attributes, SQL Functions.

# Unit VI

## PL/SQL

PL/SQL block structure, Basics of PL/SQL, Controlling PL/SQL Flow for Execution, If statements, IF-THEN-ELSE statement Execution Flow, IF-THEN-ELSEIF statement Execution Flow, LOOP Statement, Basic Loop, For Loop, While Loop.
Triggers, Types of Triggers: Row-Level Triggers, Statement Level Triggers, BEFORE and AFTER Triggers.
Cursor, Types of Cursor: Implicit and Explicit Cursor.

# Unit VII

## Internet Business Applications

Concept of on line service-E-Commerce Practice, Net Banking, Online submission of various application forms, Various kinds of online reservations such as railways, Hotels etc., Online, Customer support services, online marketing & shopping, Social Networking viz, Facebook etc.

# Unit VIII

## Project Work