Gujarat Secondary and Higher Secondary Education Board, Gandhinagar

Proposed New Syllabus of Computer Science

Standard 11

Total Hours: Theory: 35   Practical: 35

Topic No.	Topic	Theory hours	Practical Hours
1	Multimedia & MM Tools	10	10
2	Linux Commands and Shell Scripting	10	10
3	DataBase Management System	10	10
4	Current Trends in Computing	5	5

1. **Multimedia & MM Tools**
   1.1. What is multimedia?
   1.2. Building Blocks
      1.2.1. Text
      1.2.2. Image
      1.2.3. Sound
      1.2.4. Movie and Animation
      1.2.5. Interactive Objects
   1.3. Usage of multimedia
   1.4. Steps to create multimedia application
   1.5. Pencil Animation (for animations)
   1.6. SWFTools (for scripting)

2. **Linux Commands and Shell Scripting**
   2.1. Basic Linux commands like ls, man, mv, cp, rm, wc, chmod, mkdir, cd, pwd, find, grep, date, cal, echo, cat, tail, passwd, who etc.
   2.2. Working with Vim Editor
   2.3. Shell scripting and its use
   2.4. Simple shell scripts using commands mentioned above

3. **Data Base Management System**
   3.1. What are data, information, database and DBMS?
   3.2. Need of database.
   3.3. Discussion of sample database
   3.4. Introduction to Base (Brief discussion of features like tables, queries, forms, reports and macros)
   3.5. Using Base for implementing sample database. (All methods)
   3.6. Operations on table
   3.7. Using Query to retrieve information (GUI as well as SQL statements)
   3.8. Forms and Reports

4. **Current Trends in Computing**
   4.1. Computer Controlled devices (Introduction to robotics, Intelligent devices)

4.2. Emerging trends in Storage devices (NAS, SAN, Online storage options)
4.3. Emerging Technologies
- Mobile computing
- Cloud Computing
- Biometrics
- Speech recognition
- Green computing
- Digital Photography
- Internet Enabled TV (IETV)
- RFID
- GPS

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Proposed New Syllabus of Computer Science

Standard 12

Total Hours: Theory: 35   Practical: 35

Topic No.	Topic	Theory Hours	Practical Hours
1	Web Designing using Open Source Software	10	10
2	Introduction to E-Commerce	5	2
3	Introduction to Object Oriented Concepts using Java	15	15
4	Other useful Open Source tools	5	8

1. **Web Designing**
   - 1.1. HTML Forms
   - 1.2. Cascading Style Sheets
   - 1.3. Introduction to Javascript
   - 1.4. Need of Javascript
   - 1.5. Examples of simple Javascript (such as form validation etc.)
   - 1.6. General consideration while designing a website
   - 1.7. Introduction to various Open Source Web Development Tool
   - 1.8. Designing an interactive website using Kompozer

2. **E Commerce & M Commerce**
   - 2.1. What is E Commerce
   - 2.2. Terminologies of E Commerce (including RuPay)
   - 2.3. General Concepts of Ecommerce website-models,
   - 2.4. M-Commerce
   - 2.5. Payment modes and security issues in E Commerce & M Commerce

3. **Object Oriented Programming Concepts & JAVA**

   3.1. **Object Oriented Programming Concepts (5 Hours)**
   - 3.1.1   What is an object?
   - 3.1.2   Interface vs. implementation
   - 3.1.3   Abstraction and encapsulation
   - 3.1.4   Messages and functions
   - 3.1.5   Inheritance and composition
   - 3.1.6   Polymorphism.

   3.2. **Introduction to Java (3 Hours)**
   - 3.2.1   Java Environment
   - 3.2.2   Structure of a Java program
   - 3.2.3   A Java program