Subject : Information Practices
Class - XII

MONTH	CHAPTER	TOPICS
APRIL MAY JULY	Java GUI Programming	Review of class XI; Programming fundamentals, Basic concepts of class, object, inheritance and polymorphism. Commonly used libraries: String class and methods: toString(), concat(), length(), toLowerCase(), toUpperCase(), trim(), substring(). Math class methods: pow(), round(). Accessing MySQL database using JDBC to connect with database.
AUGUST	Relational Database Management System	Review of RDBS from Class XI. Database Fundamentals. Concept of Database transaction, committing and revoking a transaction using COMMIT, ROLLBACK and Savepoint. Grouping record: GROUP BY, Group functions-MAX(), MIN(), AVG(), SUM(),COUNT(); using COUNT(*),DISTINCT() clause with COUNT(); Group Functions and Null Values. Creating a table with PRIMAY KEY, FOREIGN KEY AND NOT NULL constraints, viewing constraints, viewing the columns associated with constraints using DESC command. Displaying data from multiple table: Cartesian product, using intersection and equi-join Alter table from Deleting column(s), modifying data type(s) of column(s). Adding a constraint, enabling constraints, dropping constraint. Drop table form deleting a table.
SEPTEMBER	Open Source Concept	Open source software (OSS), common FLOSS/FLOSS examples (*GNU/Linux, Firefox, OpenOffice, Java, Netbeans, MYSQL), common open standards (HTML, XML, ODF, TCP/IP); Indian Language computing: Character encoding, UNICODE, different types of fonts (Open types vs true type, static vs dynamic), entering Indian Language, Text-phonetics and key map based in script.
OCTOBER	Computer Networking	Networking; a Brief Overview. Communication Media: Wire Technologies- Co-Axial , Ethernet Cable, Optical Fiber; Wireless Technology – Blue Tooth, Infrared, Microware, Radio Link, Satellite Link; Network Devices: Modem, Hub, Switch, Repeater, Gateway and Their Functions. Types of Network: LAN, MAN, WAN, PAN; Network Topologies: Star, Bus, Tree Network Protocol: HTTP, TCT/IP, PPP, Remote Access Software Such As Team Viewer. Identifying Computer and User over a Network; Basic Concept of Domain Name, MAC and IP Address, Domain Name Resolution. Network Security Concepts: Cyber Law, Firewall, Cookies, Hackers And Crackers; Network Security Threats: Denial of Service, Intrusion Problems, Snooping Eavesdropping. Internet Applications: SMS, Voice Mail, Electronic Mail, Chat, Video Conferencing. Wireless/ Mobile Communication: GSM, CDMA, WLL, 3G, 4G
NOVEMBER	Web Application Development	URL, Web server, communicating with the web server, concept of Client and Server Side HTML based web pages covering basic tags- HTML, TITLE, BODY, H1..H6, B, I, U, CENTER, COMMENT, IMG, ANCHOR (A), Paragraph (P), Line Break (BR), Section Separator (HR), FONT, TABLE, LIST (UL, OL), FORM. Creating and accessing static pages using HTML and introduction to XML

	IT applications	Front-end interface: introduction; content and features; identifying and using appropritate component (Textbox, Radio Button, Checkbox, list etc. as learned in Unit 2 (programming)) from data entry, validation and display. Back end database; introduction and its purpose, exploring the requirement of table and its essential attributes. Front and data base connectivity: introduction, requirement and benefits. Demonstration and development of appropriate front end interface and back end database for e-Governance, e-Business and e-Learning applications. Impact and ICT on society: Social, environment and Economic benefits. In each of the above domains, identify at least two real-life problems, solving approach and develop relevant front and interface and bake-end database.
DECEMBER	Revision Tour of Java GUI Programming & Relational Database Management System.	
HOLIDAY HOME WORK	PROJECT WORK	
TEST -I	Java GUI Programming.	
HALF YEARLY EXAMINATION	Java GUI Programming, Relational Database Management System & Open Source Software	
PRE-BOARD-I EXAMINATION	Java GUI Programming, Relational Database Management System, Open Source Software, Computer Networking ,Web Application Development & IT application	
PRE-BOARD-II EXAMINATION	Java GUI Programming, Relational Database Management System, Open Source Software, Computer Networking ,Web Application Development & IT application	

SUBJECT : INFORMATICS PRACTICES (PRACTICAL)

MONTH	CHAPTER
APRIL - SEPTEMBER	JAVA GUI PROGRAMMING REVISION TOUR-I, JAVA GUI PROGRAMMING REVISION TOUR-II, CLASS & OBJECT, COMMONLY USED LIBRARIES, DATABASE CONNECTIVITY TO MYSQL, MYSQL REVISION TOUR
OCTOBER - NOVEMBER	WEB APPLICATION DEVELOPMENT - XML