

Maharshi Patanjali Vidya Mandir, Allahabad
Syllabus : 2017- 2018
Subject : Information Practices
Class - XII

MONTH	CHAPTER	TOPICS
APRIL	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.
MAY		
JULY		
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 appropriate 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	