

# DAV PUBLIC SCHOOL HEHAL , RANCHI-5

## SYLLABUS 2017-18

### SUBJECT: INFORMATICS PRACTICES (065)

MONTH	TOPIC	PERIODS	
		Th.	Pr.
June (3rd Week)	Introduction to Computer systems Computer organization Input devices: Output Devices: ☐ Secondary Storage Devices: ☐ Memory Units: Encoding scheme :ASCII,ISCI & UNICODE ☐ E-waste disposal. Security of computer system: Sources of attack and possible damages, malware – virus, worms, spyware and cookies . Computer security Types of Software: (a) System Software: (i) Operating systems: Need for operating system, major functions of Operating System; (ii) Language Processors: Assembler, Interpreter, and Compiler (b) Utility Software: Compression tools, disk defragmenter, anti-virus (c) Application Software	08	02
July	Introduction To Programming Getting started with Programming using IDE ☐ Introduction, Rapid Application Development using IDE (Integrated Development Environment) Familiarization of IDE using basic Interface components- Label, Text Field, Text Area, Button, Checkbox, Radio Button. (As per appendix A) ☐ Developing General Application (As per the guidelines at appendix B) - Getting Familiar with Java Swing User Interface components- TextField, TextArea, Button, CheckBox, RadioButton, ComboBox, List ☐ Basic component handling methods and properties: setText(), getText(), isSelected(), ,setSelected() Programming Fundamentals Data Types,Variables: Need to use variable, declaring variables, variable naming convention, assigning ,value to variables; ☐ Integer object method: parseInt Double object method: parseDouble, parseFloat	15	10
August	☐ Control Structures: Decision Structure – if, if-else, switch; Looping Structure- while, do . . while, for; Programming Guidelines: ☐ General Concepts; Modular approach; ☐ Running and debugging programs, Syntax Errors, Run-Time Errors, Logical Errors;	16	08
September	Revision and Term End Exam-I		

MONTH	TOPIC	PERIODS	
		Th.	Pr.
October	Relational Database Management System Database Management System Introduction to database concepts: Database, Relational database, Relation/Table, Attribute/Field, Tuple / Row, Data Types, Keys: Candidate key, Primary key, Alternate key, Foreign key; Introduction to MySQL ,Classification of SQL Commands: DML - SELECT, INSERT, UPDATE, DELETE DDL - CREATE, DROP, ALTER Command to select a database. Creating a table: CREATE TABLE , DESC, ALTER TABLE ,MySQL,INSERT command ,Displaying table data: SELECT command for selecting all the columns, Defining and using column alias Eliminating duplicate values from display using DISTINCT keyword Limiting rows during selection (using WHERE clause)	12	06
November	Using Comparison operators - =, <, >, <=, >=, <>, BETWEEN, IN, LIKE(%,_), Logical Operators –AND, OR, NOT and corresponding operator precedence ,ORDER BY : sorting by column alias name, sorting on multiple columns,UPDATE command to change existing data of a table, DELETE command for removing row(s) from a table.	10	06
December	String Functions: ASCII(), CHAR(), CONCAT(), INSTR(), LCASE(), UCASE(), LEFT(), LOWER(), LENGTH(), LTRIM(), MID(), RIGHT(), RTRIM(), SUBSTR(), TRIM(), UPPER(). Mathematical Functions: - POWER(), ROUND(), TRUNCATE(). Date and Time Functions: CURDATE(), DATE(), MONTH(), YEAR(), DAYNAME(), DAYOFMONTH(), DAYOFWEEK(), DAYOFYEAR(), NOW(), SYSDATE(). IT Applications e-Governance: Definition, benefits to citizens, e-Governance websites and their salient features and societal impacts e-Governance challenges,e-Business	12	04
January	Societal impacts, netbanking, Impact of ICT on society – social environmental and economic benefits e-Learning: – Definition, benefits to students (learners), teachers (trainers) and school (Institution) management:-societal impacts,e-Learning Challenges. of an ICT based national mission.	10	06
February	Project & Revision Annual Examination-2017-18		