

AIR FORCE SCHOOL HASIMARA

WEEKLY SPLITUP SYLLABUS (2025-26)

CLASS: XII-SC/ARTS/COM

SUBJECT: INFORMATICS PRACTICES (065)

BOOKS: NCERT INFORMATICS PRACTICES FOR CLASS XII
INFORMATICS PRACTICES SUMITA ARORA FOR CLASS XII

Month	Week Days	Working Days	Chapters/ Topics	Activities/ Assignments
April 25	3-5	3	Data handling using Pandas: Introduction to Python libraries- Pandas, Matplotlib. Data structures in Pandas - Series and Data Frames. Series: Creation of Series from – ndarray, dictionary, scalar value	Homework and Classwork Practical Works Class Tests
	7-11	4	Data handling using Pandas: Series: mathematical operations; Head and Tail functions; Selection, Indexing and Slicing.	
	14-19	5	Data handling using Pandas: Data Frames: creation - from dictionary of Series, list of dictionaries, Text/CSV files; display; iteration	
	21-26	6	Data handling using Pandas: Data Frames: Operations on rows and columns: add, select, delete, rename; Head and Tail functions; Indexing using Labels, Boolean Indexing;	
	28-30	3	Data handling using Pandas: Importing/Exporting Data between CSV files and Data Frames.	
May 25	1-3	3	Data Visualization using Matplotlib: Plotting: Purpose of plotting; drawing and saving following types of plots using Matplotlib – line plot, bar graph, histogram	Homework and Classwork Practical Works Class Tests
	5-8	4	Data Visualization using Matplotlib: Customizing plots: adding label, title, and legend in plots.	

Jun 25	18-21	4	Revision of database concepts and SQL commands covered in class XI	Homework and Classwork Practical Works Class Tests
	23-28	5	Revision of database concepts and SQL commands covered in class XI	
	30	1	Revision of database concepts and SQL commands covered in class XI	
July 25	1-5	5	Structured Query Language: Math functions: POWER (), ROUND (), MOD (). Text functions: UCASE ()/ UPPER (), LCASE ()/ LOWER (), MID ()/ SUBSTRING () /SUBSTR (), LENGTH (), LEFT (), RIGHT (), INSTR (), LTRIM (), RTRIM (), TRIM ().	Homework and Classwork Practical Works Class Tests
	7-11	5	Structured Query Language: Date Functions: NOW (), DATE (), MONTH (), MONTHNAME (), YEAR (), DAY (), DAYNAME (). Aggregate Functions: MAX (), MIN (), AVG (), SUM (), COUNT (); using COUNT (*).	
	14-19	6	Structured Query Language: Querying and manipulating data using Group by, Having, Order by	
	21-26	6	Structured Query Language: Working with two tables using equi-join	
	28-31	4	Networking: Introduction to networks: Network, Types of network: PAN, LAN, MAN, WAN.	
Aug 25	1-2	2	Networking: Network Devices: modem, hub, switch, repeater, router, gateway	Homework and Classwork Practical Works Class Tests
	4-8	5	Networking: Network Topologies: Star, Bus, Tree, Mesh. Introduction to Internet: Internet, URL, W W W	
	11-16	4	Networking: Introduction to Internet: its applications- Web, email, Chat, VoIP.	
	18-23	6	Networking: Website: Introduction, difference between a website and webpage, static vs dynamic web page, web server and hosting of a website.	

Aug 25	25-30	6	Networking: Web Browsers: Introduction, commonly used browsers, browser settings, add-ons and plug-ins, cookies.	Homework and Classwork Practical Works Class Tests
Sep 25	1-6	5	Societal Impacts: Digital footprint, net and communication etiquettes, data protection, intellectual property rights (IPR)	Homework and Classwork Practical Works Class Tests
	8-9	2	Societal Impacts: plagiarism, licensing and copyright	
		10-26	HALF YEARLY EXAMINATION	

Oct 25	7-10	4	Societal Impacts: free and open source software (FOSS), cybercrime and cyber laws	Homework and Classwork Practical Works Class Tests
	13-18	6	Societal Impacts: hacking, phishing, cyber bullying, overview of Indian IT Act	
	20-25	6	Societal Impacts: E-waste: hazards and management.	
	27-31	5	Societal Impacts: Awareness about health concerns related to the usage of technology.	
Nov 25	1	1	Revision	Homework and Classwork Practical Works Class Tests
	3-7	4	Revision	
	10-15	6	Revision	
	17-22	6	Revision	
	24-25	2	Revision	
	26-30	PRE-BOARD EXAM		
Dec 25	PRE-BOARD EXAM COMMOM PRE-BOARD EXAM			

Jan 26	CBSE PRACTICAL EXAM
Feb 26	CBSE THEORY EXAM
Mar 26	

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Subject Teacher & HOD