#### THE AIR FORCE SCHOOL: SUBROTO PARK: DELHI CANTT-110010

# Class - XI

### **Sub: INFORMATICS PRACTICES**

## **Weekly Syllabus (Tentative)**

## **Academic Session 2024-25**

Month	Week	Dates		Days	No of Periods	Chapter	Contents	Syllabus
Mar 24	Block T	eaching						
Apr-24	I	01-06	06-Working Saturday (Staff)	05				
	II	08-12	11 – Id-ul-Fitr	04				
	III	15-19	14 - Ambedakar Jayanti 17 – Ram Navami 21 - Mahavir Jayanti	04		Unit 1 :Introduction to Computer System	Introduction to computer and computing: evolution of computing devices, components of a computer system and their interconnections, Input/output devices.  Computer Memory	
	IV	22-27	27-Working Saturday (Student)	06		Unit 1 :Introduction to Computer System	Software: purpose and types – system and application software, generic and specific purpose software	
	V	29-30		02		Unit 1 :Introduction	Units of memory,	
						Unit 3: Database concepts and the Structured Query Language	types of memory – primary and secondary, data deletion, its recovery and related security concerns.  Database Concepts: Introduction to database concepts and its need, Database Management System. Relational data model: Concept of domain, tuple, relation, candidate key, primary key, alternate key	

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May-24	I	01-03	01-03 : ES-1 (XII)/ CT-1 (X)	03	renous	Unit 3: Database concepts and the Structured Query Language	Advantages of using Structured Query Language, Data Definition Language, Data Query Language and Data Manipulation Language,	ES-1 (XII)/ CT-1 (X) Date: 01-07 May Unit 1: Data Handling using Pandas and Data Visualization  Data Structure – Series (18 marks)  Unit IV Societal Impact
	II	06-10	06-07 : ES-1 (XII)/ CT-1 (X) 09,10 – The Quest	05		Unit 3: Database concepts and the Structured Query Language	Introduction to MySQL, creating a database using MySQL, Data Types Data Definition: CREATE TABLE	(12 marks)
	III	13-18	18- Working Saturday (Open House X & XII)	06			Revision MySql	
	1		****	SUMN	IER BRE	AK 20 MAY -30 JU	N 2024 *****	
Jul-24	I	01-06	01- School reopens for staff 06-Working Saturday (Student)	05		Unit 3: Database concepts and the Structured Query Language	Revision DDL – Create Table Data types Constraints	PT-I Class VI-X Date: 05 Jul – 12Jul  ES-2 (XII): 05 Jul – 12Jul
	II	08-12		05		Unit 3: Database concepts and the Structured Query Language	Data Query: SELECT, FROM, WHERE. like with wild card characters	Unit 1: Data Handling using Pandas (25 marks) Unit IV Societal Impact
	III	15-19	17-Muharram	04		Unit 3: Database concepts and the Structured Query	SELECT, FROM, WHERE. clauses – IN, Order by, between	(10 marks)

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						Language		
	IV	22-27	27 – Working Saturday (Students)	06		Unit 3: Database concepts and the Structured Query Language	Data Manipulation: INSERT delete update	
	V	29-31		03		Data Definition:	Creating A Database Using Mysql, Data Types CREATE TABLE, DROP TABLE, ALTER TABLE	
						Data Query:	SELECT, FROM	
						Data Manipulation:	Pattern Searching Using Wild Card Characters	
Aug-24	I	01-03	03 – Working Saturday (Open House (VI- X), XII)	03		Data Manipulation:	Select, From, Where Insert, Delete ,Update Clause- Order By, Like , In Relational Operators	
	II	05-09		05		Unit 2: Introduction to Python Basics of Python programming,	Python interpreter - interactive and script mode, the structure of a program, indentation, identifiers, keywords, constants, variables	
	III	12-16	15 – Independence Day	04		Unit 2: Introduction to Python Basics of Python programming,	types of operators, precedence of operators, data types,	
	IV	19-23	19-Raksha Bandhan	04		Unit 2: Introduction	mutable and immutable data types, statements, expressions,	ES-1 (XI): Unit 1 Computer

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						to Python Basics of Python programming,	evaluation and comments, input and output statements, data type conversion, debugging	Fundamentals Unit 3: Database concepts and the Structured Query Language
	V	26-31	26-Janmashtami 31-Working Saturday (Students) 31-Annual Prize Distribution	05			Revision	
Sep-24	I	02-06		05				
	II	09-14	14 – Working Saturday (Students)	06			Mid Term/ HYE Exam	Mid Term (PT-II)/
	III	16-21	16-Milad-un-Nabi 21 – Working Saturday (Students)	05		Unit 2: Introduction to Python Basics of Python programming,	Paper Discussion input and output statements, data type conversion, debugging. Control Statements: if-else,	HYE Date 02-14 Sep  Unit 1 Computer Fundamentals (5 marks) Unit 2: Introduction to Python Basics of Python programming, Unit 3: Database concepts and the Structured Query Language
	IV	23-27		05		Unit 2: Introduction to Python Basics of Python programming,	Control Statements: if-else and its variants ifelifelse	
	V	30		01		Unit 2: Introduction to Python Basics of Python programming,	for loop- Programs	
Oct-24	II	01-05	02-Mahatma Gandhi's	04		Unit 2: Introduction	for loop- Programs	

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			Birthday 05-Annual Prize Distribution			to Python Basics of Python programming,		
	III	07-12	09-13- Autumn Break 12- Dussehra	02		Unit 2: Introduction to Python Basics of Python programming,	Revision	
	IV	14-19	17-Maharishi Valmiki's Birthday 19 – Working Saturday (Open House VI- XII)	05		Lists	list operations - creating, initializing	
	V	21-25	20- Karwa Chouth	05		Lists	list operations - creating, initializing	
	VI	28-31	30-03 Nov – Diwali Break	02		Lists	traversing and manipulating lists list methods and built-in functions.	
			* *	* Aut	umn Br	eak 09-13 Oct	2024 ***	
Nov-24	I	04-09	09 – Working Saturday (Students)	06		Lists	revision of lists	
	II	11-15	12 – Annual Day 15 – Guru Nank's Birthday	04		Dictionary	concept of key-value pair, creating, initializing, ,	
	III	18-22		05		Dictionary	traversing	PT-II (VI-VIII): 19 Nov-10 Dec PT-III (IX): 19 Nov-10 Dec PT-III (X): 14 Nov-25
	IV	25-30	29,30 – Annual Athletic Meet	06		Dictionary	updating and deleting elements,	Nov MPB (XII): 14 Nov-25
Dec-24	1	02-07	07 – Sports Day	06		Dictionary	methods of dictionaries	Nov Unit 2: Introduction to Python Basics of Python
	II	09-13		05		Dictionary	dictionary methods	Branching

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								Statement(10 marks) Iterative computation and control flow: for, while(10 marks) List(10 marks)
	III	16-21	21-Working Saturday, Open House (X & XII)	06		Dictionary	built-in functions.	
	IV	23	24,25 – Christmas Holidays	01		Dictionary	Revision	
			*** Wint	er Br	eak fro	m 26 Dec to 0	4 Jan 2025 ***	1
Jan-25	I	06-10		05		Unit 4: Introduction to the Emerging Trends	Immersive experience (AR, VR), Robotics, Big data and its characteristics, Internet of Things (IoT), Sensors,	
	II	13-18	18-Working Saturday, Open House (VI-IX, XI)	06		Unit 4: Introduction to the Emerging Trends	Smart cities, Cloud Computing and Cloud Services (SaaS, IaaS, PaaS);	
	III	20-25	25-Citation Ceremony 25-Open House XII 26-Republic Day	06		Unit 4: Introduction to the Emerging Trends	Grid Computing, Block chain technology Revision of Unit: Introduction to the Emerging Trends	
	IV	27-31		05		Python	Revision of python, lists	
Feb-25	I	01	01 – Farewell XII 01- Open House X	01		python	Revision of dictionaries	
	II	03-07		05				Annual Exam Class IX
	III	10-14		05				& XI - 05 Feb-19 Feb 2025
	IV	17-22	22-Working Saturday (students)	06				Unit 1 :Introduction to Computer System(5 marks)

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								Unit 2: Introduction Python Programming (30 marks) Unit 3: Database concepts and the Structured Query Language (30 marks) Unit 4 Introduction to the Emerging Trends (5 marks)
	V	24-28	26-Maha Shivratri	04				
Mar-25	Annua	l Exam	<mark>Classes VI-VIII</mark> – 25 Feb <sup>.</sup>	-10 Mar	2025			

Note: The examination syllabus as mentioned above is to be considered Tentative. The final syllabus for each exam will be uploaded on the website along with the Date Sheet at the time of the examination.