



INDIAN SCHOOL MUSCAT
SENIOR SECTION
DEPARTMENT OF COMMERCE AND HUMANITIES
CLASS XI
YEAR PLAN 2020-2021(Revised)

Subject-Informatics Practices (Code: 065)

UNIT No.	Unit	Marks
1.	Introduction to Computer System	10
2.	Introductory Python Programming	25
3.	Database concepts and the Structured Query Language	30
4.	Introduction to Emerging Trends	05
	TOTAL	70

MONTH	UNIT	No of Periods
April 2020	Unit 4: Data Management Relational databases: Concept of a database, relations, attributes and tuples. keys – candidate key, primary key, alternate key, foreign key; Degree and Cardinality of a table. Use SQL – DDL/DML commands to CREATE TABLE, INSERT INTO, UPDATE TABLE, DELETE ALTER TABLE, MODIFY TABLE, DROP TABLE, keys and foreign keys; to view content of a table: SELECT-FROM-WHERE-ORDER BY along with BETWEEN, IN, LIKE. (Queries only on single table)	18
May 2020	SELECT-FROM-WHERE-ORDER BY along with BETWEEN, IN, LIKE. (Queries only on single table), SELECT-FROM-WHERE-ORDER BY along with BETWEEN, IN, LIKE. (Queries only on single table) continued.. Aggregate Functions : MIN, MAX, AVG, COUNT, SUM Unit 2 : Introduction to Python Programming	15
June 2020	Unit 2 : Introduction to Python Programming Familiarization with the basics of Python programming: a simple “hello world” program, process of writing a program, running it, and print statements; simple datatypes: integer, float, string.	18
July 2020	Introduce the notion of a variable, and methods to manipulate it (concept of L-value and R-value even if not taught explicitly) Tokens – keywords, identifiers, Literals, Delimiters, Knowledge of data types and operators: accepting input from the console, assignment statement, expressions, operators (assignment, arithmetic, relational and logical) and their precedence Writing Simple programs, Conditional statements: if, if-else, if-elif-else; simple programs: e.g.: absolute value, sort 3 numbers, divisibility. Writing Simple Programs with the use of Conditional Statements	18
August 2020	Conditional statements: if, if-else, if-elif-else; simple programs: e.g.: absolute value, sort 3 numbers, divisibility. Writing Simple Programs with the use of Conditional Statements	20
September 2020	Conditional statements: if, if-else, if-elif-else; simple programs: e.g.: absolute value, sort 3 numbers, divisibility. <p style="text-align: center;">HALF YEARLY EXAMINATION</p> Writing Simple Programs with the use of Conditional Statements Notion of iterative computation and control flow: for(range(), len()), while,	20

	flowcharts Practicing Simple programs with the use of loop and creating simple List and Dictionary Notes for Unit 1 : Introduction of Computer System	
October 2020	Text handling: compare, concat, and substring operations (without using string module). Introduction to Python modules: importing math (sqrt, ceil, floor, pow, fabs), random (random, randint, randrange), statistics (mean, median) modules.	18
November 2020	importing math (sqrt, ceil, floor, pow, fabs), random (random, randint, randrange), statistics (mean, median) modules. Continuation	12
December 2020	Winter Vacation	
January 2021	Notes for Unit 4 : Introduction to the Emerging Trends Artificial Intelligence, Machine Learning, Natural Language Processing, Immersive experience (AR, VR), Robotics, Big data and its characteristics, Internet of Things (IoT), Sensors, Smart cities, Cloud Computing and Cloud Services (SaaS, IaaS, PaaS); Grid Computing, Block chain technology. Revision for Final Exam	15
February 2021	Revision & Final Exam	

