

Kendriya Vidyalaya Sangathan, Chandigarh Region

Academic Plan for the Year 2021-22

Class: XII						
S. No.	Month (Tentative)	Name of the lesson	Teacher Resources	Subject:COMPUTER SCIENCE Learning Resources	Assessment	Assessment Links
1	APRIL-MAY	Unit I: Computational Thinking and Programming - 2 ● Revision of the basics of Python covered in Class XI.	<u>FUNCTIONS :-</u> https://www.youtube.com/watch?v=Do1VcD9XOU&list=PLr1CCTUSQvDFCZ0pCvH8krBwASCv5f	<u>REVIEW OF PYTHON :-</u> https://dtksha.gov.in/play/content/do_3130678872005529618970?contentType=PracticeQuestionSet	MCQ based test on output and error based questions Monthly test to be conducted covering syllabus of this month only	1. https://docs.google.com/forms/d/1m-9Q3BLuZow1H4C7v6wW9CpMPhn_eW98aNLtjoc9fw/edit?usp=sharing
2	JUNE-JULY	● Functions : USER DEFINED FUNCTIONS Introduction to files	<u>FUNCTIONS :-</u> https://www.youtube.com/watch?v=Do1VcD9XOU&list=PLr1CCTUSQvDFCZ0pCvH8krBwASCv5f	<u>FUNCTIONS :-</u> https://www.youtube.com/watch?v=Do1VcD9XOU&list=PLr1CCTUSQvDFCZ0pCvH8krBwASCv5f	MCQ based test on functions basics Compulsory Monthly test to be conducted covering syllabus of this month only	https://docs.google.com/forms/d/1GB4GfRLRQzKwUplmD2t9QzhVtUjOMc-1pJlEdA/edit?usp=sharing
3	AUGUST	PERIODIC TEST - 1 ● File handling ● Text File	https://dtksha.gov.in/play/content/do_313068222178598912111014?contentType=LessonPlanResource https://www.youtube.com/watch?v=Do1VcD9XOU&list=PLr1CCTUSQvDFCZ0pCvH8krBwASCv5f LESSON PLAN FILE HANDLING : https://youtu.be/allFuCbcs2s	https://dtksha.gov.in/play/content/do_313068222178598912111014?contentType=LessonPlanResource	Written test on programs based on text file : Reading and wiring data in text files, counting words, lines and letters from a given text file, make changes in a text file Compulsory Monthly test to be conducted covering syllabus of this month only	https://docs.google.com/forms/d/1Xp53FjTjnh4efexBHPjE8gNa39DjUw4MzVxTYU/edit?usp=sharing
4	September -October	● Binary File, CSV File	https://dtksha.gov.in/play/content/do_313068222178598912111014?contentType=LessonPlanResource	https://dtksha.gov.in/play/content/do_313068222178598912111014?contentType=LessonPlanResource	Case study based question on csv files, Written test on programs based on binary files. Compulsory Monthly test to be conducted covering syllabus of this month only	
5	October	PERIODIC TEST - 2				
6	November	Revision and TERM 1 Examination				
7	November	Data-structures : Implementation of Stacks in Python	<u>DATA STRUCTURES :-</u> https://www.youtube.com/watch?v=h9H0H8k&list=PLr1CCTUSQvDFCZ0pCvH8krBwASCv5f	<u>RECURSION :-</u> https://www.youtube.com/watch?v=fZVq-cvR1t134 <u>DATA STRUCTURES :-</u> https://www.youtube.com/watch?v=Do1VcD9XOU&list=PLr1CCTUSQvDFCZ0pCvH8krBwASCv5f	Written test on programs of stacks Compulsory Monthly test to be conducted covering syllabus of this month only	1. https://docs.google.com/forms/d/1mxDV2jUj8nNf5Nf4stG7LSVWmqz7ShQVpZUed/edit?usp=sharing 2. https://docs.google.com/forms/d/1FEV09dUvTuLm_bQcCJfXh9d1-4KIBHmNxcDP_eE/edit?usp=sharing
8	NOVEMBER- DECEMBER	● Evolution of Networking ● Data Communication terminologies ● Transmission media ● Network devices	<u>NETWORK DEVICES :-</u> https://www.youtube.com/watch?v=mF7bRdvkQ8t=59s <u>NETWORKING LESSON PLAN (PPT)</u> https://drive.google.com/file/d/1rR6GuZLSMwQbikwR4RHHeW2O7E8uVT/view?usp=sharing	<u>NETWORK DEVICES :-</u> https://www.youtube.com/watch?v=mF7bRdvkQ8t=59s	Full forms, Written test on basic concepts of Networking difference between various devices, and transmission cables. Compulsory Monthly test to be conducted covering syllabus of this month only	1. https://docs.google.com/forms/d/1u7W94exfy0D0-uxZoTIFmSxNpB8GQrmyQcCoT8/edit?usp=sharing 2. https://docs.google.com/forms/d/1pL5hK5n0Z1U7mSQ8_7F4SUSV9RftfEQZLlUyZTXU/edit?usp=sharing
9	JANUARY	● Network Protocol ● Mobile Telecommunication Technologies Electronic mail protocols such as SMTP, POP3, Protocols for Chat and Video Conferencing: VoIP, Wireless technologies such as Wi-Fi and WiMax	<u>NETWORKING LESSON PLAN (PPT)</u> https://drive.google.com/file/d/1rR6GuZLSMwQbikwR4RHHeW2O7E8uVT/view?usp=sharing <u>NETWORK TOPOLOGIES:-</u> https://www.youtube.com/watch?v=4P8UGVtWt&t=2s	<u>NETWORK TOPOLOGIES:-</u> https://www.youtube.com/watch?v=4P8UGVtWt&t=2s	Full forms, Written test on all basic concepts of Networking difference between various topologies. Compulsory Monthly test to be conducted covering syllabus of this month only	https://docs.google.com/forms/d/14w6gailY8gDITf5sdySDA209+GSBQD3fIBF8K-ca8o/edit?usp=sharing https://docs.google.com/forms/d/1p8BvICTZNHRaKhHyumk6LSVgrHfg9NSEvG-Huvabp8/edit?usp=sharing
10	FEBRUARY	Unit III: Database Management Database Concepts Relational data mode Structured Query Language: SQL commands SQL Functions Joins: equi-join and natural join Interface of Python with an SQL databas Revision, Project Work Submission	https://dtksha.gov.in/play/content/do_313069713887117312120?contentType=LessonPlanResource https://dtksha.gov.in/play/content/do_3130697049686897601168?contentType=ExplanationResource <u>LESSON PLAN(PPT)</u> https://drive.google.com/file/d/1rR6GuZLSMwQbikwR4RHHeW2O7E8uVT/view?usp=sharing	<u>VSA:-</u> https://dtksha.gov.in/play/content/do_3130704261858672541782?contentType=PracticeQuestionSet <u>SA</u> https://dtksha.gov.in/play/content/do_3130704259832053761651?contentType=PracticeQuestionSet	Written test on definition of keys, making queries difference between DDL and DML, Update vs Alter Delete Vs drop Equi join vs natural join Compulsory Monthly test to be conducted covering syllabus of this month only	1. https://docs.google.com/forms/d/1p5h4e13MmUjZPKhVtYtZt26BdeF5cWDrV-WOIKQ1O/edit?usp=sharing 2. https://docs.google.com/forms/d/1AFDfN9huhfckd0_adONkH7AcuYKCKNNJUszmnk8/edit?usp=sharing
11	MARCH	AISSCE Practical Examination AND TERM 2				

1. Suggested Practical List Python Programming

- Recursively find the factorial of a natural number.
- Write a recursive code to find the sum of all elements of a list.
- Write a recursive code to compute the n^{th} Fibonacci number.
- Read a text file line by line and display each word separated by a
- Read a text file and display the number of vowels/ consonants/ uppercase/ lowercase char
- Create a binary file with name and roll number. Search for a given roll number and display
- Create a binary file with roll number, name and marks. Input a roll number and update the
- Remove all the lines that contain the character 'a' in a file and write it to another file.
- Write a Python program to implement a stack and queue using a list data-structure.
- Take a sample of ten phishing e-mails (or any text file) and find most commonly occurring

Database Management

- Create a student table and insert data. Implement the following SQL
ALTER table to add new attributes / modify data type / drop attribute
UPDATE table to modify data
ORDER BY to display data in ascending / descending order
DELETE
GROUP BY and find the min, max, sum, count and average
- Similar exercise may be framed for other cases.
- Integrate SQL with Python by importing the MySQL module.

#.

acters in the file.

/ the name, if not found display appropriate message.

; marks.

g word(s)

QL commands on the student table:

ite

TE to remove tuple(s)