

# Lesson Plan

**Class-X**

**Session-2021-2021**

**Topic: Database Development (Basic)**

**Month-April-2021**

**Previous knowledge:** - to check the knowledge teacher will ask basic questions regarding the topic like:-

1. What the student understand by term storage?
2. What is data?
3. What is information?
4. What are records?

**Vocabulary used:**-data, database, dbms, flat file, primary key, foreign key, and relational database.

**Important spelling used:** - integer, varchar, boolean, binary.

**Aids/methods used to explain the topic** :- smart board, e-book, textbook, chalkboard.

**Procedure:** - topic wise chapter will be read aloud in class and teacher will explain the topic. Teacher will show diagrams on smart board to explain the topic. Important terms and required figure will be drawn on board like:



**Participation of students:**-teacher will ensure the active participation of student by giving activity to student to perform in class.

### ACTIVITY 1:-

First student will come. Teacher will ask to create table with four tuples and 3 attributes.

### ACTIVITY 2:-

Second student will come. Teacher will ask to apply the primary key.

**Recapitulation:-** to revise the concept teacher will ask few question like:

1. What is entity?
2. What is tuple?
3. What is primary key?
4. Write two features of primary key?

### Assignment

#### State true/false:-

1. You cannot update data in database. ( )
2. A database makes easy to access information. ( )
3. Data is organized in the form of rows & columns in a table. ( )
4. You can create relational database in mysql. ( )
5. Tables are integral part of database. ( )

### Lab activity

#### ACTIVITY 1:-

- Create a table with fields 'name', 'age', and 'marks'. From a 'query design' method to display the 'name' & 'marks'.

## ACTIVITY 2:-

- Create a table with field 'name', 'age' and 'name of guardian' create a form using form command and edit the table data.

## **Topic :- Digital Documentation (Advanced)**

**Month :- May-2021**

**Previous knowledge:-**teacher will ask few questions to students regarding the topic like:

1. What is use of word document?
2. Where we can use word document?

**Vocabulary used:-**modifying paragraph, alignment, spacing, page layout, margins.

**Important spelling used:-**template, text wrapping.

**Aids / methods used to explain the topic:-**text book, e-book, chalk box, smart board.

**Procedure:** -topic will be read by students turn wise in the class important terms will be written on board by teacher like:

### **1. Text wrapping: -**

It means wrap the text according to the position. Place the insertion point where you want the text wrap. This is known as text wrap.

### **2. Column break**

### **3. Header footer**

**Recapitulation:-**to revise the chapter teacher will ask few concepts from students which are already discussed in class like:-

1. What is use of header/ footer in document?
2. What is alignment?
3. What is formatting of text?

### **Assignment**

Dated:- \_\_\_\_\_

## 1. Learn short cut keys:-

- I. ctrl+1 → single space
- II. ctrl+2 → double space
- III. ctrl+5 → used for 1.5 spaced lines

## Lab activity

### ACTIVITY 1:-

open ms-word 2010 on your system.

### ACTIVITY 2:-

type any paragraph in the document.

### ACTIVITY 3:-

Perform the following:

- I. Align the text to the center of the page.
- II. Give line spacing of 1.5.
- III. Save the document with any name.

### ACTIVITY 4:-

- Insert the document title & school logo in the header

### ACTIVITY 5:-

- Insert page number & date & time in the header.
- Apply formatting features on the header.

## **Topic: Electronic Spreadsheets (Advanced)**

**Month: July-2021**

**Previous knowledge:** teacher will ask the following questions to students:

- 1) excel is a part of which suite?
- 2) what is spreadsheet ?
- 3) intersection of row and column is called\_\_\_\_\_?

**Vocabulary used:** autosum , autofill handle , conditional formatting , styles

**Aids/methods:** computer, projector, green board, smart board

**Procedure:** first

- 1) teacher will discuss uses of spreadsheet.
- 2) then teacher will explain the concepts like i) cell ii) worksheet iii) workbook

Then draw various diagrams of worksheet on board and explain the each concept in detail.

**Recapitulation:** to revise the chapter teacher will ask few questions from chapter that are already discussed in class like:

- 1)what is the use of conditional formatting ?
- 2)what is use of filter and sorting option?
- 3)what is short cut key for spell check ?
- 4) what is short cut key for autosum?
- 5)what is use of freeze option in spreadsheet?

**Assignment:**

Teacher will say the students to do back exercises of chapter and also give few questions to learn like:

Short cut keys:

A)ctrl+home->move cursor to the first cell in the sheet(a1)

B)ctrl+end-> move cursor to the end cell in the sheet.

**Participation of students:** teacher will ask student by student come and make a worksheet and enter 5 records

## **Activity :2**

Apply various formulas :

A)to do total marks  $=\text{sum}(a1:a5)$

B)to get average of marks  $=\text{average}(\text{sum}(a1:a5)/5)$

C)to multiply the cell values  $=b1*b2$

## **Lab activity:**

**Activity 1:** create a list of the months and holidays .add and calculate the total holidays in a year using the auto sum function.

**Activity 2:** create a worksheet , containing salary of employees .highlight the salary with red color if it is greater than or equal to 20000 by using conditional formatting and hide the column a in the spreadsheet.

**Activity 3:** create a spreadsheet, containing a list of marks of students' .apply name to cells containing marks and use name in formula to get average.

## **Topic: Self-Management Skills-II**

**Month:August(Till 15<sup>th</sup> August)**

### **Previous knowledge testing**

Few questions will be asked.

1. What are the qualities of self-management?
2. How self-aware are you?
3. Do you think that you could manage your hobbies, interests and studies better if you could manage your time well?

### **Vocabulary used**

Self-confidence, self-motivation, positive thinking, goal setting, time management

### **Important spellings used**

Priorities, physique, prejudices, self-worth

### **Aids/innovative methods**

Smart board, black board, chalk

### **Procedure**

Teacher will teach this chapter through the e-book. This chapter will be taught by discussing the self-management skills with the students. The meaning of self-management along with its skills will be discussed thoroughly with the students. Self-management skills such as time management, goal setting, problem solving attitude, taking care of yourself will be discussed through the motivational pictures.

## Co-scholastic activity

The teacher will arrange the students in a pair who are friends or know each other and assign activity.

Activity: the students have to rate each other on the scale of 'good', 'ok', or 'bad' on self-management skills given in the table.

<b>My name</b>		<b>My friend's name</b>
	<b>My rate of ability</b>	-----
		<b>My friend's rating of my ability</b>
<b>Confident(self confidence)</b>		
<b>Positive and cheerful</b>		
<b>Neat and clean</b>		
<b>On-time</b>		

- Rate your friend on the same rating scale and skills.
- Compare what you thought of yourself and what your friend thought of you. If it is the same, then it means that you are aware of your skills. If the ratings are different, you can discuss what the friend thought of you differently.

## Recapitulation

The abstract of the chapter will be discussed once more and a set of questions will be assigned to students.

1. What are the factors influencing self-management?
2. List any 5 self-management skills.
3. Describe the importance of self-management.

## **Topic: Communication Skills-II**

**Month: August-2021(16th August to 30 August)**

### **Previous knowledge testing**

To clear the basic concepts about communication and check the students' knowledge, few questions will be asked.

1. How you communicate with others?
2. What is the importance of communication skills?
3. How the effective communication can be done?

### **Vocabulary used:**

Verbal and non- verbal communication, perspectives, prejudice, self- confidence

### **Aids/ innovative methods**

Smart class, black board, e-book, text book

### **Procedure**

The text in the chapter will be read turn wise by the students. Important terms will be written on the board and their meanings will be discussed. Purpose of communication along with the type of communication- verbal and non-verbal will be discussed with examples. The writing skills related to phrases, kind of sentences, parts of sentence and uses of articles will be explained.

### **Participation of students**

Teacher will ensure active participation of the students by providing lab assignment.

- i. Students will draw a diagram of communication cycle in ms power point by using different shapes.

- ii. teachers will arrange students in two groups to demonstrate and practice of writing sentences and paragraphs on topic related to the subject.

### **Group discussion**

The group discussion of the students will be arranged on factors affecting perspectives in communication.

### **Recapitulation**

The chapter will be reviewed once more and a set of questions will be given to students, so that they reflect on what they learnt.

1. What do you understand by communication?
2. Name three modes of communication.
3. Name seven important elements in the process of communication.
4. Explain the parts of sentences.

## **Topic: Information and Communication Technology Skills-II**

**Month: September-2021(till 15<sup>th</sup> September)**

### **Learning objectives**

After studying this chapter, students will be able to

- Describe the role of ICT in day-today life.
- Identify the various components of computer system.
- Identify the various peripheral devices.
- Connect the world using internet and its applications

### **Previous knowledge testing**

1. Name several fields where the computers are being used.
2. To what extent, the life of human beings has been benefited from technology.
3. How the computer works?

### **Vocabulary used**

Digital devices, smart phones, research work, defence

### **Important spellings used**

Interactive learning, analyzing, booting sequence

### **Aids/ innovative methods**

Smart board, e-book, blackboard, chalk

### **Procedure**

The teacher will teach this chapter through e-book. The meaning of ict and its importance in our life will be discussed with the students. Then the teacher will arrange the group discussion of the students. The students will be arranged in a group of four and specific topics will be assigned to them. The students will write their views on the respective topics and then the discussion will be done with the

teacher. The topics of discussion covers the common ict tools, how computer functions, the block diagram of computer will be explained by taking the example of house hold gadgets such as washing machines or electronic toasters.

## **Participation of students**

### **Activity 1.**

Discuss the role and importance of ICT in personal life and in work place.

List at least five points in each area.

### **Activity 2.**

Make a mention of an activity using ICT (e.g., train reservations), the technology (e.g. online ticket booking through railway website), how ICT has affected the activity (e.g. getting train tickets sitting at home) and how the activity was conducted before the technology (e.g. queuing at railway station)

## **Recapitulation**

The chapter will be reviewed and a set of questions will be asked from the students to check their knowledge.

1. Explain how computers assist us in different areas of life?
2. Explain the various parts of CPU.

### **Topic: Revision of Syllabus**

**Month: September-2021(16th September to 30th September)**

**Chapter wise topic will be covered**

**Resource: Google Form (MCQ Form)**

## **Topic: Green Skills-II**

**Month: December-2021(till 10<sup>th</sup> December)**

**Previous knowledge:** teacher will ask the following questions to students:

- 1) what do you understand by word green skills?
- 2) what is environment?
- 3) discuss the various types of pollution?
- 4) what is the role of the human being to make environment clean?

**Vocabulary used:** sustainable development, ecological, future generations

**Aids/methods:** computer, projector, green board, smart board

### **Procedure:**

- 1) teacher will discuss benefits of green skills
- 2) then teacher will explain the concepts like i) natural resources
- 3) conservation and protection of environment values

**Recapitulation:** to revise the chapter teacher will ask few questions from chapter that are already discussed in class like:

- 1) what is sustainable development ?
- 2) short terms solutions related sustainable development?
- 3) long terms solutions related sustainable development?

### **Assignment:**

Teacher will say the students to do back exercises of chapter and also give few questions to learn like:

- Mention the main principals of sustainable development
- How human beings can change personal attitude and practices towards the environment? Explain.

**Participation of students:** teacher will give task to students like:

### **Activity :1**

Identify the problems related to sustainable development. Make a flowchart. Discuss views and ideas as to how to tackle these problems.

### **Activity :2**

Hold the group discussion on topic ,”is sustainable development actually possible , or is it just a utopian concept?”

### **Lab activity:**

**Activity 1:** prepare a poster (**ms word**) on sustainable development giving popular quotations by famous ecological and environmentalists. **Class: ix**

## **Topic: Entrepreneurial skills**

**Month: December 2021(11 December to 23 December)**

### **Learning objectives**

After studying this chapter, students will be able to

- Identify various types of business activities
- Know the type of businesses found in our surrounding community
- Understand the meaning of entrepreneurship development
- Identify the roles and rewards of entrepreneurship

## **Previous knowledge testing**

1. What are the various business activities involved from production to sale of goods and services?
2. What are the various key skills required to start a business?

## **Vocabulary used**

Entrepreneurship, non-corporate, corporate, hybrid, enterprise, staffing

## **Important spellings used**

Manufacturing, staffing, coordination, personnel, risk-taking

## **Aids/ innovative methods**

Smart board, e-book, blackboard, chalk

## **Procedure**

The teacher will explain the meaning of entrepreneur and entrepreneurship and discuss various business activities with students. All the topics of the chapter- types of business activities i.e. manufacturing, service, hybrid, types of business enterprises, characteristics of entrepreneurship, roles of an entrepreneur, rewards of entrepreneurship will be discussed in detail.

## **Co-scholastic activities**

### **Activity 1.**

Discuss in groups the roles and features of entrepreneurship. Make a presentation on any entrepreneur describing his/her success story.

### **Activity 2.**

Discuss in a group of four the advantages of entrepreneurship over service class employees.

## **Recapitulation**

The chapter will be reviewed and a set of questions will be asked from the students to check their knowledge.

1. What do you understand by the term entrepreneur?
2. State the roles of an entrepreneur.
3. Difference between corporate and non-corporate business enterprises.

## **Topic: Database Management System(Using Open Office)**

**Month: January 2021**

**Previous knowledge:** - to check the knowledge teacher will ask basic questions regarding the topic like:-

5. What the student understand by term storage?
6. What is data?
7. What is information?
8. What are records?

**Vocabulary used:**-data, database, dbms, flat file, primary key, foreign key, and relational database.

**Important spelling used:** - integer, varchar, boolean, binary.

**Aids/methods used to explain the topic** :- smart board, e-book, textbook, chalkboard.

**Procedure:** - topic wise chapter will be read aloud in class and teacher will explain the topic. Teacher will show diagrams on smart board to explain the topic. Important terms and required figure will be drawn on board like:



**Participation of students:**-teacher will ensure the active participation of student by giving activity to student to perform in class.

**ACTIVITY 1:-**

First student will come. Teacher will ask to create table with four tuples and 3 attributes.

### ACTIVITY 2:-

Second student will come. Teacher will ask to apply the primary key.

**Recapitulation:-** to revise the concept teacher will ask few question like:

5. What is entity?
6. What is tuple?
7. What is primary key?
8. Write two features of primary key?

### Assignment

#### State true/false:-

6. You cannot update data in database. ( )
7. A database makes easy to access information. ( )
8. Data is organized in the form of rows & columns in a table. ( )
9. You can create relational database in mysql. ( )
10. Tables are integral part of database. ( )

### Lab activity

#### ACTIVITY 1:-

- Create a table with fields 'name', 'age', and 'marks'. From a 'query design' method to display the 'name' & 'marks'.

#### ACTIVITY 2:-

- Create a table with field 'name', 'age' and 'name of guardian' create a form using form command and edit the table data.

## Topic: Web Application And Security

Month: February, 2021

**Previous knowledge:** teacher will ask the following questions to students:

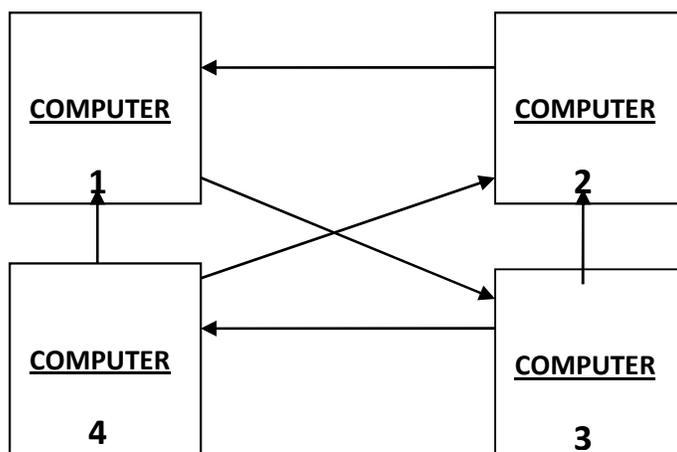
- 1) what are the uses of internet?
- 2) what is network.
- 3) full form of LAN, WAN, MAN

**Vocabulary used:** accessibility, control panel, contrast, sound sentry, toggle

**Aids/methods:** computer, projector, green board, smart board

**Procedure:** teacher will write few topics and draw diagrams on green board like

- 1) definition of network
- 2) explanation of toggle keys
- 3) explain the given diagram



Then teacher will ask few questions and students will give answers one by one.

**Recapitulation:** to revise the chapter teacher will ask few questions from chapter that are already discussed in class like:

1) draw the diagram of computer network.

2) discuss various topologies.

3) draw diagrams of star/ring/ bus topology.

### **Assignment:**

Teacher will say the students to do back exercises of chapter and also give few questions to solve like:

1) Shift, ctrl, alt are \_\_\_\_\_

2) Sound sentry is designed to help users with \_\_\_\_\_ impairments.

**Participation of students:** teacher will ensure the active participation of students . For this teacher will give few activities to students like:

**Activity :1** draw bus topology on green board

**Activity :2** draw star topology on green board

**Activity :3** draw ring topology on green board

### **Lab activity**

**Activity 1:** perform the following activities on your computer:

i) use sticky key options

ii) use sound sentry options

iii) use high contrast options

lv)use toggle key options

**Activity 2:** create an account on yahoo and use yahoo! Messenger to chat with your friends. Also add new contacts in it.

**Topic: Revision of Syllabus**

**Month: February-2021**

**Chapter wise topic will be covered**

**Resource: Google Form (MCQ Form)**