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7th ANNIVERSARY CELEBRATIONS

B.ED. - BACHELOR OF EDUCATION

PEDAGOGY OF COMPUTER SCIENCE - LESSON PLAN

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ATTENDANCE CHART

School: Hans Raj Memorial Sr. Sec. School, Kidi

Class: VIIth Subject: Computer Science

Name & Roll No.	13	14	16	18	19	20	21	23	24	25	26	27	28	2	3	4	7	8	10	11
1. Arjun	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P
2. Amit	P	P	P	P	P	P	P	P	P	P	P	L	P	P	P	P	P	P	P	P
3. Pushpa	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P
4. Pawan	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	L	P
5. Rekha	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P
6. Ragini	P	P	P	P	P	P	P	P	P	P	L	P	P	P	P	P	P	P	P	P
7. Anil	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
8. Seema	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P
9. Parveen	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
10. Sanju	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
11. Pankaj	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
12. Rahul	P	A	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
13. Komal	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P
14. Yash	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
15. Jatin	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
16. Kiran	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	L	P	P
17. Swati	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
18. Naveen	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	
19. Manjeet	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P

Kidi

9th Class

Name & Roll No.	13	14	16	18	19	20	21	23	24	25	26	27	28	2	3	4	7	8	10	11
1. Reena	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2. Neha	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3. Ashish	P	P	P	P	P	P	P	P	P	L	P	P	P	P	P	P	P	P	P	P
4. Rekha	P	P	P	P	P	P	L	P	P	P	P	P	P	P	P	P	P	P	P	P
5. Kiran	P	P	P	P	P	P	P	P	P	P	P	P	L	P	P	P	P	P	P	P
6. Kajal	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
7. Komal	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
8. Jyoti	P	P	P	P	P	P	P	P	P	P	P	P	P	P	L	P	P	P	P	P
9. Poonam	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
10. Parveen	P	P	P	P	P	P	L	P	P	P	P	P	P	P	P	P	P	P	P	P
11. Sahil	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
12. Vinay	A	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
13. Deepak	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
14. Ajay	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
15. Abhimanu	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P
16. Jyoti Rani	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
17. Seetal	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P

Signature of Pupil Teacher

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MICRO TEACHING LESSONS

LESSON No. 1

Date 08/12/2019 Duration of the period 30-35 min.

Pupil Teacher's Name Kirti Pupil Teacher's Roll No. [illegible]

Class 9th Average Age of the pupils 13-15 yrs.

Subject Computer Science Topic Introduction Skill.

Introduction Skill

Pupil Teacher Activities	Pupil Activities	Components
Good Morning Students	Good Morning Mam	Pre-Liminary Attention.
1. What is Computer?	A computer is an electronic device that accepts data, Process it & gives output.	Utilization of Previous experiences.
2. What are the characteristics of a computer?	1. It never gets tired. 2. Fast Speed 3. Accuracy 4. A computer has no inteligence of its own.	
3. Which are the major components of a computer System?	Input, Output and C.P.U.	Use of Appropriate devices
4. What are input devices?	Input devices are used to enter data	

	and instructions to the computer	Maintenance of Continuit
5. Give examples of input devices?	Keyboard, Mouse, Light-Pen etc.	
6. What are output devices?	Devices used to display information on the screen.	Relevancy in verbal and non-verbal behaviour.
7. Give examples of output devices?	Monitor, Printers, Speakers etc.	
8. What is C.P.U.?	It is central Processing unit. It is called the brain of the computer	
9. Which are the units of C.P.U.?	No Response	

Announcement Of The Topic

Well students, today we will study about "The Units of C.P.U."

RATING SCALE

Sl. No.	Components	Rating					
1.	Pre-Liminary Attention	0	1	2	3	4	(5)
2.	Utilization of Previous Experiences	0	1	2	(3)	4	5
3.	Use of Appropriate devices	0	1	2	3	(4)	5
4.	Maintenance of Continuity	0	1	2	3	(4)	5
5.	Relevancy in verbal and non-verbal behaviour.	0	1	2	3	4	(5)

LESSON No. 2

Date 9/12/2014 | Duration of the period 35 minutes

Pupil Teacher's Name Kirti | Pupil Teacher's Roll No. 1303

Class 9th | Average Age of the pupils 14-15 year

Subject Computer Science | Topic: Skill of Probing Question

Skill Of Probing Question

Pupil Teacher Activities	Pupil Activities	Components
1. Which are the major components of Computer system?		
2. Tell the name of the units of Computer System?	Input, Output Units	Refocusing
3. Tell the name of the another component of computer system?	No Response	Seeking further information
4. Between input and output units which components work?	C.P.U. Works	Prompting
5. So which is the another component of Computer system?	C.P.U.	
6. So, except input and output unit, which is the other major component of Computer System?	C.P.U.	Redirection

7. Tell the examples of input units?	Input devices, are keyboard, Mouse, Light-Pen etc.	Seeking further information
8. What is the difference between Keyboard and Mouse?	Keyboard is used for typing and Mouse is a pointing device.	Refocusing
9. Why (C.P.U.) central Processing unit is known as the brain of the computer?	Because all the processing is done by it. It is central Processing unit.	Critical Awareness

RATING SCALE

Sl. No.	COMPONENTS	RATING					
1.	Prompting	0	1	2	3	(4)	5
2.	Seeking further information	0	1	2	3	4	(5)
3.	Refocusing	0	1	2	3	(4)	5
4.	Redirection	0	1	2	3	(4)	5
5.	Increasing Critical Awareness	0	1	2	3	4	(5)

LESSON No. 3

Date 10/12/2014 Duration of the period 35 minutes

Pupil Teacher's Name Kirti Pupil Teacher's Roll No. 1303

Class 9th Average Age of the pupils 14-16 year

Subject Computer Science Topic Skill of Illustration with Example

Skill Of Illustration With Example

Pupil Teacher Activities	Pupil Activities	Components
1. Pupil Teacher tells about the input devices that these are those devices which are used to enter data to the computer. Example: Keyboard, Mouse	Students will listen carefully.	Deductive Approach.
2. (Showing Keyboard) P.T. asks what is it?	Keyboard	Use of Appropriate Media
3. Students, have you seen whatever we are typing with the help of keys of keyboard, that is displayed on the screen. For example: I want to Print on the Screen "Bred is One." It is Keyboard	Students are listening and watching carefully at the keyboard.	Inductive Approach

	which is connected to a computer through the cable. This cable establishes the relation-ship between computer and keyboard, means data is displayed on the screen.		
4.	Now, tell me what are alphabets? So, the keys from (A-Z) are known as Alphabetical keys. What are numbers? The keys from 0-9 are known as Number keys.	A-Z 0-9	Formulating Simple Examples
5.	Arithmetic keys include (+, -, *, /, =, .) symbols. Suppose we want to perform addition of two decimal numbers then (0-9), (+), (.), (-) keys are used. for example To add (2.52+3.20=5.72) is acquired on the screen.	Students will listen carefully and write down in their note-books.	Formulating Relevant examples
6.	P.T. creates the interest of pupils by saying, all of you have seen invitation		Formulating interesting examples

marriage cards. Have you noticed about the printing of these cards? This Printing is possible with special keys like Enter Key (↵), Caps lock, Space bar Key and Arrow keys (→ ↑ ↓ ←) etc.

RATING SCALE

Sl.No	COMPONENTS	RATING					
1.	Formulating Simple Examples	0	1	2	3	(4)	5
2.	Formulating Appropriate Examples	0	1	2	3	(4)	5
3.	Formulating Interesting Examples	0	1	2	3	4	(5)
4.	Use of Appropriate Media	0	1	2	(3)	4	5
5.	Inductive Approach	0	1	2	3	4	(5)
6.	Deductive Approach	0	1	2	3	(4)	5

LESSON No. 2

Date 11/12/2014 | Duration of the period 35 minutes

Pupil Teacher's Name Kirti | Pupil Teacher's Roll No. (303)

Class 9th | Average Age of the pupils 14-16 yr.

Subject Computer Science | Topic Skill of Stimulus Variation

Skill Of Stimulus Variation

Pupil Teacher Activities	Pupil Activities	Components
P.T.'S Statement: The main work of computer is to analyse the information and provide reliable results after processing. In this different agents are helpful to operate the computer. **Agents of Computer:** (i) Hardware (ii) Software **(i) Hardware:** All those components of computer, that can be touched and seen are called Hardware. All internal and external parts of computer, I/O devices are the examples of hardware. The devices necessary to operate the computer are called	Students will listen carefully- Students will listen carefully	Gestures / Change in voice / Pausing / focusing Aural / visual switching / Focusing / movement

Standard devices.

Eg. Keyboard, Hard disk etc.

Devices that are connected to the computer. Eg. Mouse, Printer etc. are called "Peripheral devices." The collecting form of standard and peripheral devices is called hardware.

1. What are Standard devices?
2. (Asking from other Student) What are Standard devices?
   Yes, Repeat the answer now.
3. (Showing Mouse) What is it?

No Response
Keyboard, Hard disc
Hardware

Change in Interaction Style.
"

(ii) **Software:** It is compulsory to give instructions to the computer to operate. These instructions are written serially in computer language. It is known as software. Ex- Unix, LINUX, O.S..

Yes, Come here and write the difference between hardware & Software.

Students will listen carefully and give response

Gesture/ Pausing/ change in voice/ Aural-Visual switching

RATING SCALE

Sl No.	COMPONENTS	RATING					
1.	Movement	0	1	2	3	(4)	5
2.	Gestures	0	1	2	(3)	4	5
3.	Change in Voice	0	1	2	3	(4)	5
4.	Pausing	0	1	2	3	(4)	5
5.	Change in Iteraction Style	0	1	2	3	(4)	(5)
6.	Aural- Visual Switching	0	1	2	3	4	(5)
7.	Focusing	0	1	2	3	(4)	5
8.	Physical involvement of Student	0	1	2	(3)	4	5

LESSON No. 5

Date 12/12/2019 Duration of the period 35 minute

Pupil Teacher's Name Kirti Pupil Teacher's Roll No. 1303

Class 9th Average Age of the pupils 14-16 yr

Subject Computer Science Topic Skill of Reinforcement.

Skill Of Reinforcement

Pupil Teacher Activities	Pupil Activities	COMPONENTS
1. What is Computer? (Good)	A computer is an electronic machine that accepts data, process it & gives output	Use of Positive Verbal Reinforce-ment.
2. Which are the parts of a computer system? (Very Good)	Input Unit, Output unit, C.P.U.	"
3. What are output devices? (Smiling)	Through which data is displayed on the screen.	Use of Positive Non-verbal Reinforcement.
4. Give any example of input devices? (Wrong)	Monitor	Use of Negative Verbal Reinforcement.

5.	Tell me about the input devices? (Good)	Keyboard, Mouse	Use of Positive Verbal Reinforce-ment.
6.	What is C.P.U.? (Nodding the Head)	It is central Processing Unit.	Use of Positive Verbal Reinforce-ment.
7.	Why is it known as the brain of computer? (Very Good).	Because all the processing is done by	Use of Positive Verbal Reinforce-ment.
8.	What are the components of central Processing unit? (Excellent)	A.L.U and C.U. A.L.U. stands for Arithmatic logic Unit and C.U. stands for central Unit.	Use of Extra Verbal Reinforce-ment.

RATING SCALE

Sl.No.	COMPONENTS	RATING					
1.	Use of Positive Verbal Reinforcement	0	1	2	3	(4)	5
2.	Use of Positive Non-Verbal Reinforcement	0	1	2	(3)	4	5
3.	Use of Extra Verbal Rein-forcement.	0	1	2	3	(4)	5
4.	Use of Negative Verbal Reinforcement.	0	1	2	3	4	(5)

MEGA TEACHING LESSONS

LESSON No. 1

Date 14/01/2015 Duration of the period 30-35 min.

Pupil Teacher's Name Kisti Pupil Teacher's Roll No. 1303

Class 8th Average Age of the pupils. 14-16 yrs

Subject Computer Science Topic Computer and its application

(2) Instructional Material

General Material:

Chalk, Duster, Blackboard, Pointer etc

Specific Material:

A chart showing characteristics of a computer and IPO cycle.

(1) Instructional Objectives

(i) The students will be able to know about computer and its functioning.

(ii) The students will be able to recognize different areas where computer is used.

(i) The students will be able to classify the area where computer is used.

(ii) The students will be able to discriminate between data and information.

Application:

The students will be able to use computer in their daily life.

Aim:

The students will be able to draw chart showing organization of computer syste

Previous Knowledge Testing

Pupil's Activities	Teacher's Activities
1. What are the names of some electronic Machines?	e.g. Radio, Washing Machine etc.
2. In early time which equipment was used mainly for fast calculations?	Calculator
3. Which machine was used for typing text?	Typewriter
4. Can Typewriter and calculator save data for future use?	No
5. What is Computer?	No Response

Announcement Of The Topic

Finding the students unable to answer the question, P.T. will announce the topic by saying that today we will study about "computer and its application."

Presentation

P.T. will develop her lesson with lecture cum demonstration method and with the help of different skills.

Teaching Point	Pupil Teacher Activities	Pupil Activities
Origin of word	P.T. explains that the computer got its name from the word 'compute' which means 'to calculate'	Students will listen carefully.
Meaning of computer	A computer is a group of electronic and mechanical devices that can perform various operations on data in accordance to produce useful results.	

Computer word has been originated for the word 'compute' which means 'to calculate'

Data	The unprocessed or raw facts are called data.	
Data Processor	Processed and meaningful facts are termed as information.	Students will listen carefully and write down in their note-books
Characteristics of computer	A computer process data which is done by C.P.U. So it is known as Data Processor A computer has various characteristics such as: *Speed - A computer is very fast device. Extremely complex operations on the data can be carried out in seconds. *Accuracy - The accuracy of a computer is consistently high. *Storage Capacity - A large volume of data (information) can be stored in the memory of a computer. *Diligence - A computer is free from the problems of tiredness, monotony & lack of concentration.	
Partial Recapitulation	Q1 What is computer? Q2 What is data & information? Q3 What are the characteristics of a computer?	Students give response

Characteristics of Computer

* Speed
* Accuracy
* Storage Capacity
* Diligence

Area of Application	There is a wide area where computer can be used.
In Business	In business houses and organizations the computer acts as ware houses for storing data, performing calculations, preparing presentations etc.
At home	Nowadays computer are a part of many household activities. They can be used for entertainment.
In Education	The computers can be effectively used as teaching aids. Internet has become an excellent source of gathering information about any topic.
In Research	Scientists were the initial users of computers. Since then, it has become an indispensable tool to carry out experiments, records.
Communication across the world	Since a computer can communicate, it has led to the development of internet.

Area of Computer Application :

* In Business
* At home
* In Education
* In Research
* Communication across the world.

Students will listen carefully and write down in their note-books

Summarization

P.T. will summarize her topic by saying that today we have studied about "Computer, its characteristics

and use". A computer has various characteristics like Accuracy, Speed, Diligence, Storage capacity etc and it uses areas are in Business, in education, in Research, At home, At Internet etc.

Evaluation

~~Recapitulation~~:

1. What is computer?
2. What are the characteristics of computer?
3. Computer is used as communicator. Explain.
4. Describe different areas of application of computer?

Inspection:

P.T. will check the note-books of the students

Home work

Write and learn about computer, its uses and characteristics.

LESSON No. 2

Date 16/01/2015 Duration of the period 30-35 min.

Pupil Teacher's Name Kirti Pupil Teacher's Roll No 1303

Class 9th Average Age of the pupils 14-16 yr.

Subject Computer Science Topic Computer types

Instructional Material

General Material:

Chalk, Duster, Blackboard, Pointer etc.

Specific Material:

A chart showing different types of computer.

Instructional Objectives

Knowledge:

(i) The students will be able to know about the types of computer.

(ii) The students will be able to recognize different types of computer.

Understanding:

(i) The students will be able to classify different types of computer.

(ii) The students will be able to discriminate among different types of computer.

Application:

The students will be able to use different types of computer in their daily life.

Skill:

The students will be able to draw chart showing different types of computer.

Previous Knowledge Testing

Pupil Teacher Activities	Pupil Activities
1. What is a computer?	A computer is an electronic device that accepts data, process it & gives Output.
2. What are the characteristic of computer?	Accuracy, Speed, Diligence, Storage capacity.
3. What is data?	Raw facts are known as data.
4. What are the parts of computer?	Input Unit, Output Units, Control Units, C.P.U.
5. What are the types of computer?	No Response.

Announcement Of The Topic

Finding the Students unable to answer the question, P.T. will announce the topic by saying that today we will study about, "Types of Computer on basis of Size."

Presentation

P.T. will develop her lesson with lecture cum-demonstration method and with the help of different skills.

Teaching Point	Pupil Teacher Activities	Pupil Activities
Meaning	P.T. explains that a computer is a group of electronic and mechanical devices that can perform various operations on data in accordance with a given set of instructions to produce useful results	Students will listen carefully
Parts of Computer	There are many parts of computer like input units, output units, control unit, Storage devices.	
Types of Computer	Computer can be classified according to size and storage capacity such as Microcomputers, Mini-	

A computer is an electronic device that can perform various operations on data in accordance with a given set of instructions to produce useful results.

Computers, Mainframes, Super Computer.

Students will listen carefully

Micro-Computers

Microcomputers were developed in early 1980s. A microcomputer is a complete computer on a smaller scale and is generally a synonym for the more common, term, Personal computer or PC. It contains a microprocessor, memory in the form of ROM and R/W memory, I/O ports housed in a unit called as motherboard.

Types of Computer

1) Micro computer
2) Mini Computer
3) Mainframe
4) Super Computer

Mini-Computers

Minicomputer are larger in size, have greater storage capacity and operate at a high speed. Mini-computer is a computer of an intermediate size b/w the size of microcomputer and a mainframe. Minicomputers are stand alone computers used for general business applications They cost less than a main frame computer. PDP-1 and IBM's AS/400 series examples of minicomputers.

Students will listen carefully and write in their note books.

Partial Recapitulation

1. Name the parts of computers?
2. What are the types of computer?
3. What is minicomputers?

Student give response

Mainframe Mainframe is an industry term for a large computer, typically manufactured for the commercial applications of large scale business. They are very expensive. They are usually connected to a large number of peripherals, e.g; printers, disk drives, terminals etc. IBM 3090, Cyber 170, IBM 4318 are examples of mainframe.

Super Computers Super computer, formerly used a synonym for 'Cray Supercomputer' is the fastest and most expensive computer in the world. These are used for performing calculations in trillions of rate in a very short time. Their mainuse is for forecasting of weather, drug testing. PARAM 9000, CRAY3, Anugag, Nec-500 are examples of supercomputers.

Students will listen carefully.

Summarization

P.T. will summarize her topic by saying that today we have studied about "Types of computers on basis of size." There are four types of

computer such as Microcomputer, Minicomputer, Mainframe and supercomputers.

Evaluation

Recapitulation:

1. Which are basic parts of computer?
2. What are types of computer on basis of size?
3. What are Mainframe computers, Super computers?
4. What is micro computer?

Inspection:

1. To check the note books of the students

Home work

Write and learn about types of computer on the basis of size.

LESSON No. 3

Date 19/01/2015 Duration of the period 30-35

Pupil Teacher's Name Kirti Pupil Teacher's Roll No. 1303

Class 8th Average Age of the pupils 14-16yr

Subject Computer Science Topic Components of a Computer

Instructional Material

General Material :

Chalk, Duster, Black-board, Pointer etc

Specific Material :

A chart showing components of a computer.

Instructional Objectives

Knowledge :

(i) The students will be able to know about components of a computer.

(ii) The students will be able to recognize different components of a computer.

Understanding :

(i) The students will be able to classify different components of a computer.

(ii) The students will be able to discriminate among different components of a computer.

Application: The students will be able to use computer in their daily life.

Skill: The students will be able to draw chart showing components of a computer.

Previous Knowledge Testing

Pupil Teacher Activities	Pupil Activities
1. What is a computer?	A computer is an electronic device that accepts data, process it & gives output.
2. What are the characteristic of computer?	Accuracy, Speed, Diligence, Storage Capacity.
3. What is data?	Raw facts are known as data.
4. What are the components of a computer?	No Response.

Announcement Of The Topic

Finding the students unable to answer the question, P.T. will announce the topic by saying that today we will study about, "Components of a computer"

Presentation

P.T. will develop her lesson with lecture cum-demonstration method and with the help of different skills.

Teaching Point	Pupil Teacher Activities	Pupil Activities
Meaning	P.T. explains that a computer is a group of electronic and mechanical devices that can perform various operations on data in accordance with a given set of instructions to produce useful results	Students will listen carefully
Major components of a computer	The major components of a computer system are:	

~~Black board~~ ~~Work~~

1. Central Processing Unit
2. Input Unit
3. Output Unit
4. Memory Unit
5. Arithmetic and Logical Unit
6. Control Unit

Students will listen carefully and write in their Note-books

Central Processing Unit

CPU is termed as brain of the computer as each and every activity of computer is controlled by it. The CPU consists of the arithmetic and logical unit, the control unit and the central memory. It is at the CPU that the manipulation of symbols, numbers and letters takes place. In computer system all calculations and comparisons are made inside the CPU.

Arithmetic and logical unit

Arithmetic and logical unit is responsible for performing all arithmetic and logical operations on data selected from the memory i.e, it performs addition, subtraction, multiplication, division and logical comparison on the data, sent to it from the memory.

Students will listen carefully and write in their note-books

Control Unit

It determines the sequence in which the computer programs and instruction are executed things like processing of programs stored in the main memory, interpretation of the instructions and issuing of signals for other units of the computer to execute them.

Memory Unit

The process of saving data and instructions permanently is known as storage. All the data and instructions are stored here before and after processing. Intermediate results of processing is also stored here.

Input Unit

This unit is responsible for handling all the inputs to the computer. The input device include the keyboard, Mouse, Joystick, and optical character reader. The input unit takes data from us, to the computer in an organised manner for processing.

Output Unit

This unit is responsible for representing the output to user of the computer. It perform the reverse of an Input unit. It send information obtained from memory to the user. It links the computer with external environment. For this output devices are used like Monitors, Printer, Plotter etc.

Students will listen carefully.

Students will listen carefully and write down in their own note-books.

Components of Computer

1) Central Processing Unit
2) Input Unit
3) Output Unit
4) Memory Unit
5) Arithmetic and logical Unit
6) Control Unit.

Summarization

P. To will summarize her topic by saying that today we have studied about component of a computer. The major components of computer are CPU, Input unit, output unit, memory unit.

Evaluation

Recapitulation:

1. What are the major components of a computer.
2. What is CPU? Explain.
3. What is Output unit and give example of output devices
4. What is memory Unit? Explain.

Inspection:

P. To will check the note books of the students

Home work

Write and Learn about components of a computer.

LESSON No. 4

Date 21/01/2015 | Duration of the period 30-35 min.

Pupil Teacher's Name Kirti | Pupil Teacher's Roll No. 1303

Class 8th | Average Age of the pupils 14-16 yr.

Subject Computer Science | Topic Input devices

(2) # Instructional Material

General Material :

Chalk, Duster, Black-board, Printer etc.

Specific Material :

A chart showing different Input devices.

(1) # Instructional Objectives

~~Knowledge~~

(i) The students will be able to know ~~about~~ the Input devices.

(ii) The students will be able to recognize different input devices.

~~Understanding~~

(i) The students will be able to classify different input devices.

(ii) The students will be able to discriminate among different input devices.

~~Application~~

The students will be able to use computers in their daily life.

The students will be able to draw chart showing different input devices.

Previous Knowledge Testing

Pupil Teacher Activities	Pupil Activities
1. What is a computer?	A computer is an electronic device that accepts data, process it & gives output.
2. What is data?	Raw facts are known as data.
3. What are parts of a computer?	Input Unit, Output Unit, Control unit, C.P.U.
4. What are input devices?	No Response.

Announcement of the Topic

Finding the students unable to answer the question, P.T. will announce the topic by

saying that today we will study about "Input devices."

Presentation

P.T. will develop her lesson with lecture cum-demonstration method and with the help of different skills.

Teaching Point	Pupil Teacher Activities	Pupil Activities
Meaning of Input devices	The devices used to fed data into computer is known as input devices. A good input device provide timely, accurate and useful data to the main memory of the computer for processing.	
Input devices	These are some input devices such as Punched card, keyboard, mouse, Trackball, Joystick, Touch screen.	
Punched card.	Punched cards has been used as a input device from earliest days of computer history. It was considered as a very important medium for storing and entering data in that days.	

Input Devices

* Keyboard
* Punched Card
* Mouse
* Trackball
* Joystick
* Touch Screen.

Keyboard Keyboard is the standard input device attached to all computers. The layout of the standard keyboard can be divided into the following sectors:

* Typing keys
* Numeric keypad
* Function keys
* Control keys
* Special keys

Mouse Mouse is an object used as a pointing and drawing device. The mouse is an input device that is used with personal computer. It usually has a ball and buttons and is connected to the system unit through serial port. It rolls on a small ball

Trackball Trackball is another pointing device that works on the rolling of a small box. It has a ball which can be rotated by fingers in any direction, the cursor moves accordingly.

Joystick

Joystick is the another device which comes in the categary of pointing device. It moves in all directions and controals the movements of the cursar. It offers three tyfes of controls.

* Digital Contol
* Glide Control
* Direct control

Touch-Screen

A touch screen is a monitar screen that allow the users to interact with a computer system by touching an area of the display screen. Touch screens are easy to use. Touch screen is used when information has to be accessed with minimum effort. They are used in information providing systems like the hospital, airlines, railway reservation counters, ATM's etc.

Summarization

P.T. will summarize her topic by saying that today we have studied about "Input devices". The input

devices are punched card, keyboard, mouse, Trackball, Joystick etc.

Evaluation

Recapitulation:

1. What is input device?
2. Write name of input devices?
3. Explain keyboard.
4. Give example where touch screen input device is used.

Inspection:

P.T. will take round in the class to check the note-books of the students.

Home work

Write and Learn about Input devices.

LESSON No. ...5.....

Date 23/01/2015 Duration of the period 30-35 mint.

Pupil Teacher's Name Kiti Pupil Teacher's Roll No 1303

Class 8th Average Age of the pupils 14-16 yr.

Subject Computer Science Topic Output devices

Instructional Material

General Material:

Chalk, Duster, Black-board, Pointer etc.

Specific Material:

A chart related to the output devices.

Instructional Objectives

Knowledge:

(i) The students will be able to know about different output devices.
(ii) The students will be able to recognize all the output devices.

Understanding:

(i) The students will be able to classify different output devices.
(ii) The students will be able to discriminate among different printers.

Application:

The students will be able to use these output devices in their daily life.

Skill:

The students will be able to use different printers.

Previous Knowledge Testing

Pupil Teacher Activities	Pupil Activities
1. What is computer?	A computer is an electronic machine that accepts data process it and give outputs Throught Input devices.
2. How can we enter the data to the computer?	
3. Name Some Input devices?	Keyboard, Mouse, Etc.
4. What do you mean by output devices?	Output devices are those through which data is displayed as result.
5. Give some examples of Output devices.	No Response

Announcement Of The Topic

Finding the students unable to answer the question, P.T will announce the topic by saying that today we will study about **output devices**

Presentation

P.T will develop her lesson with lecture cum-demonstration method and with the help of different skills.

Teaching Point	Pupil Teacher Activities	Pupil Activities	Blackboard Work
Meaning of Output devices	Output devices are those devices that help us to produce output as result data on the computer screen or on the paper.		
Output devices	These are some output devices such as pointer, Plotter, Linker, Visual Display Unit (VDU), speakers.		
Types of output devices	The output on the screen is referred to as the soft output as it is not permanent. In order to preserve the output		

use to produce it on paper using a printer. This output on paper is referred as the hard copy.

Visual Display Unit

A VDU is the most common and infact, a very essential output device used with every computer system. It is like a television set with the only difference that it receives its signals from the CPU. It is also called a Monitor. The quality of image produced by a monitor is termed as Resolution. The screen is divided into tiny dots called Pixels.

Partial Recapitulation

1. What do you mean by output devices?
2. What is meant by Soft copy?
3. What is monitor?

Students give Response.

Printer

Printers are the most common output device. They are used to produce output on the paper is called Printout or hardcopy. A

Output Devices

* Printer
* Plotter
* Speakers
* Visual Display Unit.

printer has following features :-
* Speed is measured in terms of character per second & line per minute.
* It implies the total number of characters recognized by the Printer.

Plotter These output devices are used to print graphs, maps, mechanical drawing etc. The drawings can be multicoloured or black & white depending upon the ink used. These are useful in CAD.

Speakers In order to get audio output, speakers are used. Sound cards are used to convert the digital signals into analog signals which are then feed to the speakers. Speakers produce the sound from the electrical signals received.

Summarization

P.T. will summarize her topic by saying that today we have studied about Output devices. Output can be of two types : Soft copy and Hard copy output.

Evaluation

Recapitulation:

1. What is output device?
2. What do you mean soft copy output?
3. What do you mean by VDU?
4. What do you mean by speakers?

Inspection:

P.T will take round in the class to check the note books of the students.

Home work

write and learn about Output devices.

DISCUSSION LESSON

LESSON No. ....1.....

Date 04/02/2015

Pupil Teacher's Name Kirti

Class 9th

Subject Computer Science

Duration of the period 30-35 mint.

Pupil Teacher's Roll No. 1303

Average Age of the pupils 14-16 yr.

Topic Internet

(2) Instructional Material

General Material:
Chalk, Duster, Black-board, Pointer etc.

Specific Material:
A chart showing about internet, web-browsing, E-mail.

(1) Instructional Objectives

~~Knowledge:~~

(i) The students will be able to know about internet.

(ii) The students will be able to ~~recognize~~ different programs downloaded on internet.

~~Understanding:~~

(i) The students will be able to classify different terms related to internet.

(ii) The students will be able to discriminate b/w different search engines.

~~Application:~~

(i) The students will be able to use a search engine for individual searches.

(ii) The students will be able to chat in the chatroom.

Skill

The students will be able to make an account on a free email site.

Previous Knowledge Testing

Pupil Teacher Activities	Pupil Activities
1. What is Computer?	It is an electronic device that accepts data, process it and gives output.
2. What are input units?	Through which data is entered to the computer.
3. Give any example of input devices?	Keyboard, Mouse, Light Pen etc.
4. Can different computers be connected with each-other?	Yes.
5. What does this connectivity called?	No Response.

Announcement Of The Topic

Finding the students unable to answer the question. P.T. will announce the topic by saying that today we will study about 'Internet'.

-Web browsing, E-Mail, Chating.

Presentation

P.T. will develop her lesson with Illustration method and with the help of different Skills.

Teaching Point	Pupil Teacher Activities	Pupil Activities
Etymological Meaning	P.T. explains that the word internet may be split into two keywords that is "inter" that means inside or within and "net" which means mesh. Combination means "within mesh". Probably internet is a mesh of computers.	Students will listen carefully.
Meaning of Internet	Internet is a network of computers from all over the world that allows users to share information and communicate with each other. OR A set of computer network made up of large number of smaller networks, using different networking Protocals is called Internet.	

Getting Connected to Internet	Getting connected to the internet is very easy and usually inexpansive. To access internet you must have a PC, a modem and an internet service provider (ISP).	Students will listen carefully and write in their note-books.
PC	As internet is a network of computers, the first thing you need to access it is a PC.	
Modem	The next thing you need is a modem. A modem is a piece of equipment, a part of hardware that enables your PC to link to the internet.	
ISP	An ISP is the company that provides you with access to the internet. They sell hour packages to us and such a package is usually called an internet account.	
Partial Recapitulation	① What is Internet ? ② How can we connect with internet ? ③ What is an ISP ?	Students give response
W.W.W.	www is known as world wide web, is the public face of internet. The text and images we see on the internet are the part of a	

web page. Websites are made of number of web pages and WWW is the result of all these web sites. Web Pages are written in HTML Language.

E-mail Electronic mail, commonly called E-mail is another feature of internet used to keep in touch with people from distant lands. A message can reach a computer on the other side of the world in minutes at the cost of a local call An E-mail address or account takes the form of <mail to : name @ somewhere. com> 'Name' refers to sender's name and 'somewhere. com' refers to the site or host that provides you with this e-mail account. for eg: yahoo.com, hotmail.com etc.

Students will listen carefully and write down in their note books.

WWW

Web Page + Web Page + Web Page

↓

Website + Website + Website

WWW.

E-mail address :

email to : name@somewhere.com.

Summarization

P.To will summarize her topic by saying that today we have studied about "Internet and how can we connect with it"?

Evaluation

Recapitulation:

1. What is Internet?
2. How we can get connected to internet?
3. What is web site?
4. What is ISP?
5. What is E-mail?

Inspection:

R.T will check the note-books of the students.

Home work:

Write and learn about Internet and How can we connect with it?

SCHOOL TEACHING PRACTICE LESSONS

LESSON No. ...1.....

Date 13/02/2015 Duration of the period..... 30-35 mint.

Pupil Teacher's Name Kirti Pupil Teacher's Roll No. 1303

Class 9th Average Age of the pupils 14-16 yr.

Subject Computer Science Topic..... Software and its types.

Instructional Material

General Material:

Chalk, Duster, Blackboard, Pointer etc.

Specific Material:

A chart showing different types of software.

Instructional Objectives

Knowledge:

(i) The students will be able to recognize different types of software.

(ii) The students will be able to know about the software.

Understanding:

(i) The students will be able to classify different softwares.

(ii) The students will be able to discriminate between system and application software.

Application:

The students will be able to use software in their day to day life.

(i) The students will be able to draw charts showing different softwares.
(ii) The students will be able to install different softwares.

Previous Knowledge Testing

Pupil Teacher Activities	Pupil Activities
1. In which form data is stored into computer?	In 0 or 1
2. What are the agents of computer?	Hardware, Software
3. What is Hardware?	Which can be seen and touched.
4. What is Software?	Set of programmes.
5. How many types of softwares?	No Response.

Announcement Of The Topic

Finding the students unable to answer the

question, P.T. will announce the topic by saying that today we will study about 'Software & its types.'

Presentation

P.T. will develop her lesson with lecture cum-demonstration method and with the help of different Skills.

Teaching Point	Pupil Teacher Activities	Pupil Activities	~~Black Board~~ Work
Meaning of Software	Software is a set of programs which instructs the computer to perform various operations on the data	Students will listen carefully.	Software is a set of Programs
Types of Software	There are two types of software i.e System Software and Application Software.		Types of Software
System Software	System software controls the overall operation of a computer system.		System Software Application Software
Types of System Software	The various types of system software are (i) Operating System (ii) loaders (iii) Linkers (iv) Language Translators		

Teaching Point	Pupil Teacher Activities	
Operating System	In order to make a compator user-friendly and to manage the resources of a system effectively, a collection of programs known as the O.S. is used. An operating system manages the resources i.e. input, output and memory devices.	Students will listen carefully and write down in their note books
Loaders	The CPU can process the data or the program present in the main memory. The Programs kept in secondary memory must be loaded into it so that they can be processed. The software which is helpful is called Loader.	
Linkers	A linker is used to link the various modules of a software package.	
Partial Recapitulation	① What is Software? ② How many types of software? ③ Explain Loaders, Linkers?	Students give response.
Application Software	P.T. explains that application software is a set of programs which is developed	

Types of System Software
→ Operating System
→ Loaders
→ Linkers

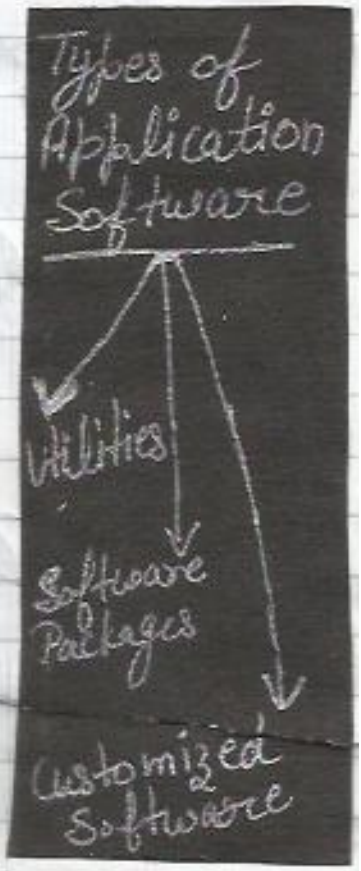
to offer solution to a specific problem of the user.

Types of application Software — Various types of application software are : Utilities, Software Packages, Customized Software.

Utilities — These Software are used to perform the maintenance and housekeeping functions of a computer like, checking and removing virus, recovering detecting file.

Software Packages — These perform a specific function for the user. Example are word Processing Software, Desktop Publishing Software.

Customized Software — These software are made on demand of user to solve his problem as per his requirements. It is tailor made software.



Summarization

P.T. will summarize her topic by saying that today we have studied "System and Application Software".

System software controls the overall operations of a computer system whereas Application Software is developed to offer solutions to a specific problem of the user.

Evaluation

Recapitulations

1. What is Software?
2. What are different types of Software?
3. Explain Loaders Software?
4. What is Application Software?

Instructions:

P.T. will take round in the class to check the note-books of the students.

Home work

Write and learn about Software and its types.

LESSON No. .2.....

Date 14/02/2015
Pupil Teacher's Name Kirti
Class 9th
Subject Computer Science.

Duration of the period 30-35 mint.
Pupil Teacher's Roll No. 1303
Average Age of the pupils 14-16 yr.
Topic The Network

Introductional Material

General Material:

Chalk, Duster, Pointer, Blackboard.

Specific Material:

A chart showing different types of network.

Introductional Objectives

~~Knowledge~~

(i) The students will be able to know about the internet.
(ii) The students will be able to recognize the parts of network.

~~Understanding~~

(i) The students will be able to see relationship among the different types of network.
(ii) The students will be able to discriminate among different types of network.
(iii) The students will be able to cite examples of different network.

3. Application:

The students will be able to use different types of network in their daily life.

4. Skill:

(i) The students will be able to draw charts showing different types of network.
(ii) The students will be able to prepare model of different types of network.

Previous Knowledge Testing

Pupil Teacher Activities	Pupil Activities
1. In ancient time, how we were sending information to others?	By Letters
2. Now a days, how we are talking to the people who are far from us?	Through Telephone, Mobiles
3. How we acquire the information of the country?	Through T.V.
4. What this process of sharing information is called?	Communication
5. What is Network?	No Response

Announcement Of The Topic

Finding the students unable to answer the question P.T. will announce her topic by saying that today we will study about "Network and its types."

Presentation

P.T. will develop her lesson by lecture cum-demonstration method and with the help of different skills:

Teaching Point	Pupil Teacher Activities	Pupil Activities
Meaning of Computer Network	P.T. explains with the help of Chart A 'computer Network' is defined as an interconnection of computers that are able to exchange information	Students will watch at the chart & listen carefully
Defination	A computer network is an interconnection of computers that are able to share their resources	
Forms of Network	There are two forms of network.	

	(i) Wired Network. (ii) Wireless Network.	Students will write in their note-books.
Components of Computer Network	P.T. writes the components on Black-board and tells that there are mainly three components of network. 1. The Sender 2. The Receiver 3. The Medium or channel of information transfer.	
Sectional Recapitulation	Q1. What is Computer Network? Q2. How many forms of Network are? Name them. Q3. Write the components of Computer Network.	Students give response to the questions.
Types of Network	P.T. explains with the help of chart that on geographical spread bases. Networks are classified into three types: LAN, MAN and WAN. P.T. explains with the help of chart.	Students will listen care-fully
LAN	LAN stands for Local Area Network. Network confined to a local area such as	

an office, a building or a school is called LAN. A computer called the server usually manages the administration of the network. The data transmission speed is not very fast.

MAN

It stands for Metropolitan Area Network. It is a network that links computers spread over a city. Cabel Internet connection is an example of MAN.

WAN

The interconnection of computers spread over the entire world is called a WAN means wide area network. Generally WAN use Satellities for transmission.

Summarization

P.T. will summarize her topic by saying that today we have studied about 'Network and its types'. There are three types of network i.e. LAN, MAN and WAN.

Evaluation

Recapitulation:

Q1. What is Computer Networks?
Q2. What are the forms of Computer Networks?
Q3 How many types of networking are?
Q4 What is full form of MAN?

Inspection Work:

P.T. will check the note-books of the students.

Home work

Write and learn about Network and its types.

LESSON No. 3

Date 16/02/2015 Duration of the period 30-35 min.

Pupil Teacher's Name Kirti Pupil Teacher's Roll No. 1303

Class 9th Average Age of the pupils 14-16 yrs

Subject Computer Science Topic MS-Word

Instructional Material

General Material:

Chalk, Duster, Blackboard, Pointer etc.

Specific Material:

A chart showing different menus of MS-word.

Instructional Objectives

~~Knowledge~~:

(i) The students will be able to acquire the knowledge of MS-word and its tools

(ii) The students will be able to recognize different menus of MS-word.

~~Understanding~~:

(i) The students will be able to see relationships among different menus of MS-word.

(ii) The students will be able to discriminate among different applications of MS-office.

Application:

(i) The students will be able to use MS-word in their daily life.
(ii) The students will be able to enter text with special font.
(iii) The students will be able to open MS-word and label various parts of a word window.

Objectives:

(i) The students will be able to create a document and save it.
(ii) The students will be able to exit a word document.

Previous knowledge testing

	Pupil Teacher Activities	Pupil Activities
1.	What is Data?	Raw facts are known as data.
2.	What is information?	Processed form of data.
3.	How data is entered into the computer?	Through keyboard.
4.	Data is entered in which form?	In Text form, Numbers form.

E. Name any Software	Operating System.
E. What is word Processor?	No Response.

Announcement Of The Topic

Finding the students unable to answer the question P.T. will announce the topic that we will study about "MS-Word."

Presentation

P.T. will develop her lesson with lecture cum demonstration method and with the help of different skills.

Teaching Point	Pupil Teacher Activities	Pupil Activities / Black Board Work
Meaning of word Processor	Operating System has a program that deals with text based information. Such a software is called a word-Processor.	Students will listen carefully

Definition of Word Processor

Word Processor is a software used for creating and manipulating documents inside the computer.

Students will listen carefully

MS-word

Microsoft word, commonly known as Word, is the most popular word Processing software Package. It is a part of MS-office.

Versions

MS-word has different version like Word 95, Word 97, word 2000, Word XP.

Starting MS-Word

T explains with the help of chart about the following steps to execute MS word.

* Click on Start button.
* select Programs option.
* select MS office option.
* Click on MS-word.

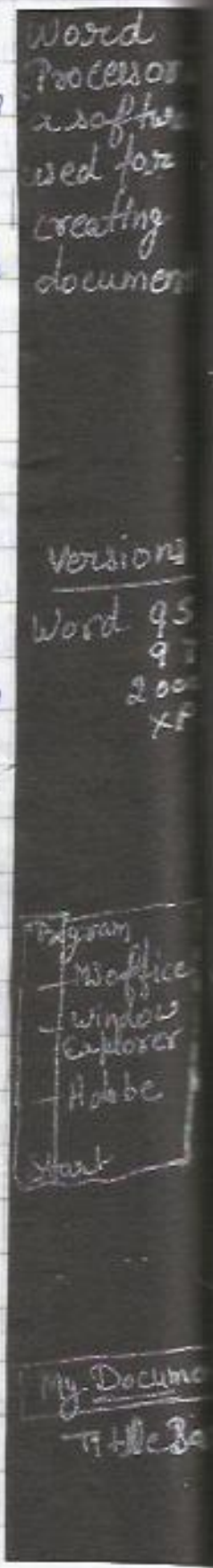
Students will listen and write the steps in their note-books.

Document Editing Area

After executing word Program, Screen will be displayed and the blank area where the typed matter is displayed is known as the Document Editing Area.

TittleBar

In any window, the top bar displaying the current document name and software name as



	MS word is known as Tittle Bar.	
Menu Bar	It lies just below the tittle Bar displaying a list of drop down menus such as File, Edit, View, Insert, Format, Tools etc.	Students will listen carefully.
Tool Bar	These are present right under the Menu Bar. Tool Bar displays a list of commonly used commands in the form of icons.	
Ruler	The Ruler displays the left and the right margins and tab settings.	Students will listen carefully
Pointer and Cursor	There is a pointer denoting the position of the mouse. A cursor will also be blinking in the middle of the screen that is the Document Editing Area.	

Summarization

P.T. will summarize her topic by saying that today we have studied about "MS-Word and different Bars." There are various versions of MS-Word. MS-word is a part of MS office.

Evaluation

Recapitulation:

(i) What is Word Processor?
(ii) Name different versions of MS Word?
(iii) Which is the latest version of MS word?
(iv) What is Menu Bar?

Inspection Work:

P.T. will check the note books of the students.

Home work

Write and learn about MS-word

LESSON No. ...4.....

Date 18/02/2015 Duration of the period 30-35mint.

Pupil Teacher's Name Kirti Pupil Teacher's Roll No. 1303

Class 9th Average Age of the pupils 14-16yr.

Subject Computer Science Topic Menus of MS-Word

Instructional Material

General Material:

Chalk, Duster, Blackboard, Pointer etc

Specific Material:

A chart showing different menus.

Instructional Objectives

1. Knowledge:

(i) The students will be able to acquire the knowledge of MS Word and its tools.

(ii) The students will be able to recognize different menus of MS word.

2. Understanding:

(i) The students will be able to see relationships among different menus of MS word.

(ii) The students will be able to discriminate among different applications of MS-office.

3. Application:

The students will be able to use

different menus of MS word in their daily life.

(ii) The students will be able to enter text with different font, size and style.

(i) The students will be able to create a document and save it.

(ii) The students will be able to draw tables using MS word.

Previous Knowledge Testing

Pupil	Teacher Activities
1. What is full form of MS?	Microsoft
2. What is word Processor?	The software that deals with text based information is known as Word Processor.
3. What is Tittle Bar?	The bar on the top displaying the current document name is known as Tittle Bar.
4. What is Ruler?	which display the left and right margins is known as ruler.
5. What is menu Bar?	Unsatisfactory Response.

Announcement Of The Topic

Finding the students unable to answer the question. The P.T. will announce the topic that today we will study about different "Menus of MS- word."

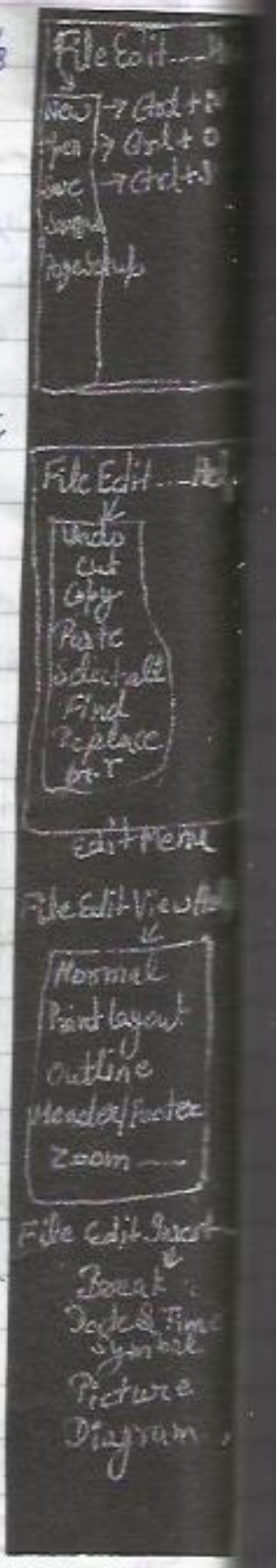
Presentation

P.T. will develop her lesson with lecture cum-demonstration method and with the help of different skills.

Teaching Point	Pupil Teacher Activities	Pupil Activities
Menu Bar	The menu bar displays nine drop-down menus on it. A menu displays a list of commands.	Students will listen carefully.
File Menu	To create a new document or open an already existing one, saving a document or printing any document, the file menu gives you to set of options to access, create, save and print documents.	

Black-board work

Edit Menu	The edit menu contains commands for editing the text like undo, cut, copy, Paste. It also has option like find, Replace & Go To find and make changes in the text. Replace and Go Offers you help to replace certain words sentences in the text.	Students will write the options of each menu in their note-books.
View Menu	The view menu enables functions related to layout of your document. like the way you want to view it, the appearance including the Ruler, header and footer etc.	
Insert Menu	This menu contains option for inserting page numbers, date, time, pictures, drawings etc. into your text document.	Students will listen carefully.
Format Menu	The format menu has the options for formatting the document like font, size, colour, bold, italics,	



	style etc.), Paragraphs, bullets & numbering etc.	
Tools	This menu has tools like spell check for checking any incorrect spelling & grammar check.	Students will write & watch carefully.
Table	This menu is meant for drawing tables. It has every option from inserting table, to adding, deleting, merging rows and columns etc.	

Summarization

P.T. will summarize her topic by saying that today we have studied about **'different menus of MS-Word'** containing in Menu Bar which has nine drop down menus like file, Edit, View, Insert, format, window and help. Each has different option in each menu.

Evaluation

Recapitulation:

1. How many menus are in Menu Bar?
2. What is file Menu?
3. How can we change font, size, with the help of menu, it is possible?
4. With the help of which menu, spelling can be checked.

Inspection Work:

P.T. will check the note-books of the students.

Home work

Write and learn about different menus of MS-word.

LESSON No. ...5.....

Date 19/02/2015 Duration of the period.....30-35 mint.

Pupil Teacher's Name Kriti Pupil Teacher's Roll No. 1303

Class 9th Average Age of the pupils.....14-16 yr

Subject Computer Science Topic MS Word - Editing Text

Instructional Material

General Material:

Chalk, Dusters, Blackboard, Pointer etc.

Specific Material:

A chart showing functions to edit the text.

Instructional Objectives

Knowledge:

(i) The students will be able to recall the Menus of MS-word.

(ii) The students will be able to recognize different functions to edit the text.

Understanding:

(i) The students will be able to add and remove text.

(ii) The students will be able to discriminate among different functions to edit text.

(iii) The students will be able to see relationships b/w different functions.

(3) Application:

(i) The students will be able to use cut, copy and paste options.
(ii) The students will be able to change the font settings.

(4) Skill:

The students will be able to draw charts and use different functions.

Previous Knowledge Testing

	Pupil's Teacher's Activities	Pupil's Activities
1.	What is word Processor?	The software that deals with text based information is known as word Processor.
2.	How can we change case with the help of which menu?	Format menu
3.	What is Ruler?	Which displays the left and right margins in the text.
4.	Changing the text, in the computer language what it is known as?	Editing the text.
5.	How can we edit the text?	Unsatisfactory

Announcement Of The Topic

Finding the students unable to answer the question P.T. will announce the topic that today we will study about MS word- Editing Text.

Presentation

P.T. will develop her lesson with lecture cum demonstration method and with the help of different skills.

Teaching Point	Pupil Teacher Activities	Pupil Activities	~~Black Board~~
Meaning of Editing the text	while typing the text in a document in word, you may make grammatical errors or once you are through with your work, you might wish to add few words or sentences to your text. Thus to add, remove or change text is known as editing the text.	Students will listen carefully	Editing the text means adding, Removing & changing the text.
To Add Text	If you want to add an alphabet, a word or a sentence		

bring the cursor to the desired place where you want to add text.

* Click the mouse pointer on the desired place. OR
* Move the cursor with the help of Arrow keys.

Students will listen and watch carefully

To Remove Text

The delete and Backspace keys are used to remove a character or a space at a time. Delete Delete key removes the cursor characters to the right of the cursor.

Backspace key. Removes the characters to the left of the cursor and hence the name Backspace i.e ← Space.

Partial Recapitulation

Q1 What is Editing the text menu?

Q2. How can be text added to prewritten text?

Students give response

To change Text

To change the text, delete the old text. Beside adding, removing and changing text, you can move or duplicate any text or character for which MS Word has the cut,

Arrow Keys ↓ ↑ ← →

Delete - Del

← Backspace Key.

To Change Text
- Cut
- Copy
- Paste

copy & paste options in the Edit Menu.

Copying Text

For copying text first of all, select the text area you want to copy then

* click on Edit Menu and select copy option. Position the cursor on your desired point of position. From the Edit Menu Select Paste Option and then click on mouse.
* Press Ctrl+C. Position the cursor on desired position then Press Ctrl +V together.

Moving Text

For moving text select the text area you want to move

* click on Edit Menu and click on cut Icon & Position the cursor and click on Paste icon.
* Press Ctrl+X. Position the cursor then Press Ctrl+V.

Students will write down in their note-books

For Copying Text

* Press ctrl + C
* Position the cursor on daired Position
* Press Ctrl+V

Students will write down in their note-books.

For Moving Text

* Press ctrl + X
* Position the cursor
* Press Ctrl+V

Summarization

P.T. will summarize her topic by saying that today we have studied about M.S word - Editing Text with cut, copy, Paste, Delete, Backspace options.

Evaluation

Recapitulation:

1. How can text be removed?
2. How can text be changed?
3. What is the shortcut key for auto copy option?
4. How can text be moved from one place to another

Inspection Work:

- To check the note books of the students.

Home work

write and learn about MS word - Editing Text.

LESSON No. ...6.....

Date 20/02/2015 Duration of the period 30-35 mint.

Pupil Teacher's Name Kirti Pupil Teacher's Roll No. 1303

Class 9th Average Age of the pupils 14-16 yr

Subject Computer Science Topic MS-Excel.

(V) Instructional Material

General Material :

Chalk, Duster, Blackboard, Pointer etc.

Specific Material :

A chart showing different components and functions of MS-Excel.

(VI) Instructional Objectives

~~1. Knowledge~~

(i) The students will be able to know about MS-Excel.

(ii) The students will be able to recognize different components of MS-Excel.

~~2. Understanding :~~

(i) The students will be able to discriminate among different spreadsheet softwares.

(ii) The students will be able to classify the data types.

Application:

The students will be able to use spreadsheet in their daily life..

Skill:

The students will be able to make spreadsheet with rows and columns.

Previous Knowledge Testing

	Pupil Teacher Activities	Pupil Activities
1.	What is data?	Raw Material is known as data.
2.	What is information?	Processed form of data is known as information.
3.	How data is arranged into the computer?	In the form of worksheets etc.
4.	What is GUI	Graphical User Interface.
5.	For calculations, comparisons and analysis, which Software is being used currently?	No Response.

Announcement Of The Topic

Finding the students unable to answer the question, P.T will announce the topic that today we

will study about 'MS- Excel'

Presentation

T. To will develop her lesson with lecture cum demonstration method and with the help of different skills. By making use of Mathematical & Statistical analysis.

Teaching Point	Pupil Teacher Activities	Pupil Activities
Introduction	Mathematical analysis, comparison bko two sets of data, graphical representation of data etc are the tasks which require accuracy and if these tasks are carried out manually, Prove to be time consuming and tedious. Spreadsheet software is designed to solve such problems. They incorporate varios features to perform calculations, comparisons, analysis etc.	Pupil listen carefully
Meaning	MS-Excel is a spreadsheet software. It is a GUI spreadsheet Package and is shipped as the part of MS- office.	
Advantages of spreadsheet	* The calculations can be carried out quickly and very easily * Accurate Results.	

SpreadSheet or Worksheet is GUI based.

* Large amount of data can be stored, modified & manipulated.
* Data can be represented Pictorially by charts and graphs.

Students will listen carefully and write in their notebooks

Components of Excel MS Excel has many components like workbook, worksheet, Rows, Columns, cells, cell Pointer etc.

Workbook It is an excel document. It is the basic file in Excel

Worksheet The Page of workbook is called worksheet. It is basic work area of Excel. It consists of grid of cells formed by intersection of rows and columns.

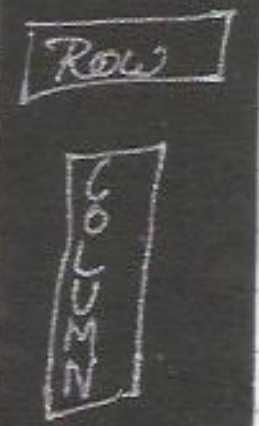
Rows Horizontal Sections of a worksheet are called Rows. There are 65,536 rows in a worksheet.

Columns Vertical Sections of the worksheet are called columns. There are 256 columns in a worksheet.

Partial Recapitulation
Q1 What is a workbook?
Q2 How many total rows are in a worksheet?
Q3 What the vertical sections are called?

Students give response

Components of Excel
- Workbook
- Worksheet
- Rows
- Columns
- Cell
- Cell Pointer
- Types of Data
- Numbers
- Text
- Formulas



Cell — A cell is an intersection of row and column. Each cell has a unique address. The address is formed by the combination of row and column number for example C3

Cell Pointer — It is a highlighted cell boundary that specifies which cell is active. A cell is termed as Active or current cell.

Types of Data — There are basically three types of data that can be entered in the worksheets.

Numbers — It contains digits from 0 to 9 with special characters like + - (,) / % $

Text — A Text entry is a combination of non-numeric characters, numbers, special characters, space etc. for eg: 12Feb-HJJ, RT6TY.

Formulas — It consists of operate & operaters. Operands can be cell address or numeric data.

Summarization

P.T. will summarize her topic by saying that today we have studied about "MS-Excel and its components" which are rows, columns, worksheet, workbook, cells etc.

Evaluation

Recapitulation:

Q1. What is spreadsheet?
Q2. What are the advantages of a spreadsheet?
Q3. Which are the components of a worksheet?
Q4. What is cell and cell Pointer?

Inspection Work:

P.T. will check the note-books of the students.

Home work

Learn and write about MS- Excel.

LESSON No. ....7.....

Date 21/02/2015 | Duration of the period 30-35 mint.

Pupil Teacher's Name Kirti | Pupil Teacher's Roll No. 1303

Class 9th | Average Age of the pupils 14-16yr

Subject Computer Science | Topic MS-Excel different functions

(2) Instructional Material

General Material:

Chalk, Duster, Blackboard, Pointer etc.

Specific Material:

A chart showing different functions and editing the contents of cell.

(1) Instructional Objectives

Knowledge:

(i) The students will be able to know about different functions of the cell.
(ii) The students will be able to recognize different functions performed on cells.

Understanding:

(i) The students will be able to cite examples of different functions.
(ii) The students will be able to classify different functions performed on cells.

3. Application:

The students will be able to use different functions for mathematics & statistical basis in the daily life

4. Skill:

The students will be able to edit the contents of the cell and prepare worksheet in MS- Excel.

Previous Knowledge Testing

Pupil/Teacher Activities	Pupil Activities
1. What is MS- Excel?	A spreadsheet software used to perform calculations, comparisons.
2. What are the components of MS- Excel?	workbook, worksheet, Rows, Columns, cell, cell Address.
3. What are rows & columns?	Horizontal and Vertical section of a worksheet
4. What is a cell?	It is an intersection of a row and column.
5. How can we edit the contents of the cell?	No Response.

Announcement of The Topic

Finding the students unable to answer the questions. P.T. will announce the topic that today we will study about "MS-Excel and different functions."

Presentation

P.T. will develop her lessons with the help of lecture cum demonstration method and with the help of different skills.

Teaching Point	Pupil Teacher Activities	Black-Board Writing
Editing the Cell	Editing the cell includes modify, delete, copy or some other opesations.	Students will listen carefully.
To Select a Cell	To perform any data entry or editing function, you must select the cell. To select a cell, Place the mouse pointer on the cell and click it.	
To modify The contents	P.T. explains with the help of chart that we can change the contents of a cell by overwriting * Select the cell. * Enter the new contents. * Press the enter key.	

Place the mouse Pointer on cell and click is.

B2 | ▽ | X ✓ = | 20

	A	B	C
1	Anil	10	
2	Priya	20	
3	Beant	35	
4	Greeta	40	

origin of Content

To Delete the content of cell

Following steps are followed to delete the contents of cell.

* Select the cell.
* Press Delete key.

To Copy the contents of the cell & Paste

Using the Menu option.

* Select the cell
* Select the option Edit → Copy
* Place the cell Pointer in the cell
* Select the option Edit → Paste.

Using Key-board.

* Select the cell.
* Press the keys Ctrl+C together
* Place the cell Pointer in cell.
* Press the key Ctrl+V together.

Formulas

Formulas can also be entered in the cells. It is combination of operands & operators.

To enter a formula

A formula starts with an "=" sign. To enter a formula in the cell, type the "=" sign and then write the formula consisting of operators and operands

Task

(i) To add two no. 2 and 3.

(ii) To multiply

Formula to be entered in the cell. P.T. explains that it is written as = 2+3 then the result is 5.

=2*3, the result is 6.

Functions

Functions are built in formulas which consists of arguments &

Students will listen carefully and write in their note-book

Students will listen carefully

structure.

= Function Name (Argumen 1, Argument 2,—)

Functions available In Excel

Some functions are available such as SUM(), Average(), Max(), Min()

Sum() It takes in numeric arguments and adds them. for e.g. Sum (3,5) will display 8. Sum (A_3, B_5) will display the result of addition of data in the cells A_3 and B_5.

Average() Average (3,5) will display 4.

Max() It displays the largest value present in argument list e.g. Max(3,5) will display 5.

Min() It displays the lowest value. e.g.:- Min (3,5) will display 3.

For Adding
= 2+3
= 5
= 2*3 = 6
For multiply.

Functions

⇒ Function Name (Argument 1, Argument 2—) available are SUM(), Min(), Max(), Average(). Average (3,5) will display 4. Max(3,5) will display 5 min(3,5) = 3.

Summarization

P.T. will summarize the topic by saying that today we have studied about 'MS Excel and its function', with cut, copy, Move, Paste options.

Evaluation

~~Recapitulation~~

1. How can we modify the cell contents?
2. What are the shortcut keys for copy, Paste?
3. How a formula can be entered in worksheet?
4. Which are the different functions available in MS-Excel.

~~Inspection work~~

~~I will check the note books of the students~~

Home work

Write and learn about MS-Excel and its functions.

LESSON No. 8

Date 23/02/2015

Duration of the period 30-35 mint.

Pupil Teacher's Name Kirti

Pupil Teacher's Roll No. 1303

Class 8th

Average Age of the pupils 14-16yr

Subject Computer Science

Topic Memory and its types.

(2) Instructional Material

General Material:

Chalk, Duster, Blackboard, Printer etc.

Specific Material:

A chart showing different types of memory.

(1) Instructional Objectives

~~Knowledge~~:

(i) The students will be able to know about memory.

(ii) The students will be able to recognize different types of memory.

~~Understanding~~:

(i) The students will be able to classify different types of memory.

(ii) The students will be able to discriminate between primary and secondary memory.

~~Application~~:

The students will be able to use computer memory in their day to day life.

~~Objectives~~:

(i) The students will be able to create chart showing difference blw types of memory.
(ii) The students will be able to measure the computer memory.

Previous Knowledge Testing

Pupil Teacher Activities	Pupil Activities
1. What is data?	Raw facts are known as data.
2. What is memory?	Which allows a person to remember things.
3. Do machines also have memory?	Yes
4. Give any example of such machine?	Computer
5. How can we define computer memory?	No Response.

Announcement Of the Topic

Finding the students unable to answer the question, P.T. will announce the topic by saying that today we will study about "Memory and its types."

Presentation

P.T will develop her lesson with lecture cum demonstration method and with the help of different skills.

Teaching Point	Pupil Teacher Activities	Pupil Activities
Meaning of computer Memory	P.T explains that memory is an ability to store or retain data for any period of time, short or long. Memory is a measurement of an individual's capacity to remember.	Students will listen carefully
Measurement of memory	P.T explains with the help of chart As we know computer can understand only electrical signals 'on' or 'off' and '0' or '1'. one byte is equal to one character. This is the smallest unit of memory. Memory is measured on the scale of bytes. Standard for Measurement is 1024 bytes = 1 Kilobyte (KB) 1024 KB = 1 Megabyte (MB) 1024 MB => 1 Gigabyte (GB) 1024 GB = 1 Terabyte (TB)	Students will listen carefully and write in their note-books.

Standard for Measurement

1024 bytes = 1 KB
1024 KB = 1 MB
1024 MB = 1 GB
1024 GB = 1 TB

Requirement of Computer Memory

Computer Memory is required for two purposes - one for the immediate use that is during working of computer and one is to store various programs for long term use.

Students will write down.

Types of Memory

Computer memory can be classified as (i) Primary Method (Internal Storage Memory)
(ii) Secondary (External Storage Memory)

Partial Recapitulation

1. What do you mean by memory?
2. How can we measure memory?
3. What are the types of memory?
4. What is another name for primary & Secondary memory?

Students give response to the questions

Primary Memory

The main memory of computer is known as Primary memory. It is important for the immediate Processing when the computer is switched on. It is of two types.

* Random Access Memory (RAM)
* Read only Memory (ROM)

Students will listen carefully and write further in their note books.

RAM

It is temporary memory. Its contents get deleted when the computer is switched off. Size of ROM are - 32 MB, 64 MB, 128 MB, 256 MB. e.g. of RAM is calculator.

Types of Memory

- Primary Memory
- Secondary Memory

Primary Memory

- Random Access Memory (RAM)
- Read only Memory (ROM)

ROM

It is the permanent memory. ROM does not allow anything to be written on it. It contains programs that are permanently "coded" on in a form which is understood by the computer.

Secondary Memory

This memory helps the user to store data & programs for later use. It is found outside the CPU box. So, It is called external memory. Storage devices such as floppy disk, Hard disk, CD are secondary devices.

Students will listen carefully and Look in their note books.

Secondary Memory

e.g: Floppy-disk, Hard-disk, CD (compact disk)

Summarization

T.T. will summarize her topic that today we have studied 'memory and its types'. Types of memory are Primary and Secondary Memory.

Evaluation

~~Recapitulation:~~

1. What is Memory?
2. What is requirement of computer Memory?
3. What are the types of Memory?
4. What is the full form RAM?
5. What is Secondary Memory?

~~Inspection work:~~

~~1. I will check the books of students.~~

Home work

Write and learn about memory and its types.

LESSON No. ...9.....

Date....24/02/2015 Duration of the period.....30-35 mint.....

Pupil Teacher's Name ....Kirti Pupil Teacher's Roll No. .....1303.....

Class.....9th..... Average Age of the pupils.....14-16 yr.....

Subject...Computer Science Topic...Secondary Storage devices

(2) Instructional Material

General Material:

Chalk, Duster, Blackboard, Pointer etc.

Specific Material:

Showing some real storage devices.

(1) Instructional Objectives

~~a) Knowledge:~~

(i) The students will be able to know about secondary storage devices.
(ii) The students will be able to recognize different storage devices.

~~b) Understanding:~~

(i) The students will be able to classify different secondary storage devices.
(ii) The students will be able to discriminate among different storage devices.

~~c) Application:~~

The students will be able to use these

storage devices in their day to day life.

Skill: The students will be able to store and copy data from one device to another.

Previous Knowledge Testing

Pupil Teacher Activities	Pupil Activities
1. What is computer?	It is an electronic machine that accepts data, process and give output.
2. What is Memory?	Capacity to retain Data for short or long time period.
3. What are the types of Memory?	Primary and Secondary Memory.
4. What is RAM?	Random Access Memory. It is temporary memory of the computer.
5. What is another name for external storage memory?	Secondary Memory.
6. Give any example of Secondary Storage device?	No Response.

Announcement Of The Topic

Finding the student unable to answer the question, P.T. will announce the topic by saying that today we will study about "Secondary Storage Devices".

Presentation

P.T. will develop her lesson with lecture cum demonstration method and with the help of different skills.

Teaching Point	Pupil-teacher Activities	Chalk Board Activities
Meaning of Secondary Memory	Computer needs external storage devices for storing the information permanently. The external storage media is called secondary memory of the computer.	Students will listen carefully.
Secondary Storage Devices	Commonly used external storage devices are * Hard disk * Floppy Disk * optical disk (CD-ROM, DVD)	
Disk Drives	Disk drives helps in reading and writing from/to the storage media. For e.g: to use floppy disk, we need a floppy drive.	

External Devices
- Hard disk
- Floppy Disk
- optical disk (CD-ROM, DVD)

Hard disk

It is the storage media which resides the system unit of the computer. Every computer has its own hard disk. Hard disks have a large memory and the capacity to store large amount of data. They consist of a number of disks with the read/write heads inside a fixed pack. Read/write heads are connected with access arms which are used to move heads.

- Features
  * Contain many circular disks.
  * Capacity range from 20 MB to [illegible]
  * It is referred as C: or C drive.

Floppy disk

These are individually packed disks. These are plastic disks packed to square plastic jackets. It is portable and can be used to copy data from one computer to another. Floppy disk is divided into tracks and sectors.

- Features
  * also called as Portable disk.
  * It is refereed as A: or A drive.
  * Maximum capacity of 1.44 MB.
  * available in 5¼" inches & 3½" inches.

Partial Recapitulation

Q1 What are Secondary Storage devices?
Q2. What is hard disk?
Q3 What are features of Floppy disk?

Students will listen carefully.

Students will write down their note books.

Students give response

Features of Harddisk

* Contain many circular disks
* Capacity range from 20 MB to
* It is referred as C: or C drive

Floppy disk Sector

Track

Optical disk These disks are circular disk made up of plastic material and coated with alluminium layer. These are of two types * CD * DVD.

CD CD-ROM stands for compact Disk Read only Memory. It has storage capacity upto 700 MB (= 486 floppy disks). Data stored on it can only be read. It is used to store games, movies, encyclopedia, living books etc.

DVD DVD stands for Digital versatile disk. It is similar to CD but it has larger data storage capacity. A standard DVD hold about 7 times more data than a CD does.

Pendrive It is compact memory device which can support upto 2 GB disk space i.e. 1400 times of 1.44 MB floppy disk.

Optical disk :-

* CD
* DVD
* Pendrive

D.V.D
Digital versatile Disk.

SUMMARIZATION

P.T. will summarize her topic by saying that today we have studied about 'Secondary Storage Devices.'

Evaluation

Recapitulation:

1. What is Secondary Memory?
2. What is Hard disk?
3. What are the types of optical disk?
4. What is Pen Drive?

Inspection Work:

T. T. will check the note books of the students.

Home work

Write and learn about Secondary Storage devices.

LESSON No. 10

Date 25/02/2015 | Duration of the period 30-35 mint.

Pupil Teacher's Name Kirti | Pupil Teacher's Roll No. 1303

Class 9th | Average Age of the pupils 14-16 yr

Subject Computer Science | Topic Inside the System Unit

(7) Instructional Material

General Material:

Chalk, Duster, Blackboard, Pointer etc.

Specific Material:

A chart showing different components inside the computer system.

(1) Instructional Objectives

~~a) Knowledge~~

(i) The students will be able to know about the components of computer system.

(ii) The students will be able to recognize different internal components

~~b) Understanding~~

(i) The students will be able to classify different components of computer system.

(ii) The students will be able to discriminate different components.

3. Application

The students will be able to use these components in their day to day life.

4. Skill

(i) The students will be able to analyse different components.

(ii) The students will be able to prepare chart.

Previous Knowledge Testing

	Pupil Teacher Activities	Pupil Activities
1.	How data is entered to the computer?	Through input devices.
2.	How data is displayed on paper or on monitor?	Through Output devices.
3.	How data is processed?	Through C.P.U.
4.	What are the components of computer System?	Mainly CPU Parts.
5.	Which are the components of computer system other than C.P.U. Parts.	No Response.

Announcement Of The Topic

Finding the students unable to answer the question, P.T. will announce the topic by saying that today we will study about "Components Inside the System Unit."

Presentation

P.T. will develop her lesson with lecture-cum-demonstration method and with the help of different skills.

Teaching Point	Pupil Teacher Activities	Pupil Activities	Black Board Activities
System Unit	P.T. explains that the system unit is the most important part which contains the components like CPU, hard disk rather, it contains many other parts besides C.P.U.	Students will listen carefully.	System Unit ↓ → CPU → Hard disk → IC → SMPS → Memory Chip → Clock Chip → Registers → Mother Board
Integrated Circuit	P.T. tells that Integrated Circuit is called Ic and is a collection of various electronic components together with the help of wires on silicon crystal. Integrated circuits is also called		

a chip. There are various kinds of chips.

Mother board — It is the main component placed in the system unit. It is rectangular board containing all integrated circuits. All the electronic components like power supply box, battery, CPU, disk drive, main memory, I/O Ports, expansion slots are fixed on the mother board.

SMPS — Switched Mode Power Supply is responsible for receiving the current from the main power supply and distributing it b/w the various components of the mother board.

CPU — Microprocessor is known as the brain of the computer. It is a small silicon chip responsible for executing all the instructions.

Clock chip — The chip is like the timer in the computer. The activities of CPU are related with beats of clock chip.

Students will listen carefully and write in their note-books.

Motherboard Computer
- Battery
- CPU
- Disk Drive
- Main Memory
- I/O Ports

Partial Recapitulation
1. What is System Unit?
2. What is full form of I.C.?
3. What is SMPS?

Students give response

Memory Chip Computer has two types of memory.
Primary & Secondary Memory.

Registers Registers are electronic circuits used as temporary storage areas in the system. These circuits hold the binary data in the form of electric pulses.

Ports Ports are like connections on the motherboard through which the devices to be used are connected to the computer with the help of cable.
Ports are of three types:
* Serial * USB * Parallel

Hard disk Hard disk is one of the basic internal storage media which can be placed in drive and connected with cable to its port on motherboard.

Types of Memory
- Primary Memory
- Secondary Memory

Ports
- Serial
- USB
- Parallel

Summarization

P.T. will summarize her topic by saying that today we have studied about "Component inside the system unit."

Evaluation

Recapitulation:

1. What is system Unit?
2. What is memory chip?
3. What is Hard disk?
4. Explain motherboard?

Inspection Work:

T will take round in the class to see and check the note books of the students.

Home work

Write and learn about components inside the system unit.

LESSON No. ...11.....

Date 26/02/2015 Duration of the period 30-35 mint.

Pupil Teacher's Name Kirti Pupil Teacher's Roll No. 1303

Class 10th Average Age of the pupils 14-16 yr.

Subject Computer System Topic Binary Number System

(2) Instructional Material

General Material:

Chalk, Duster, Blackboard, Pointer etc.

Specific Material:

A chart showing different number systems and its conversion.

(1) Instructional Objectives

a) ~~Knowledge~~

(i) The students will be able to know about the number system.

(ii) The students will be able to recognize about the binary number system.

b) Understanding

(i) The students will be able to discriminate between decimal and binary number system.

(ii) The students will be able to reason out about the number System.

3. Application:

The students will be able to use number system in their daily life.

4. Skill:

The students will be able to analyse briefly the number system and its conversion.

Previous Knowledge Testing

	Pupil Teacher Activities	Pupil Activities
1.	What are numbers?	Numbers are in mathematics like 0, 1, 2 ___ etc.
2.	How data is entered into computer?	Though input devices.
3.	Data is stored in which form into computer?	In 0 to 1
4.	What is role of number system in mathematics?	The number system is used to perform different arithmatic operations.
5.	What is Binary number system?	No Response

Announcement of The Topic

Finding the students unable to answer the question P.T. will announce the topic by saying that today we will study about "Binary Number System."

Presentation

P.T. will develop the lesson with lecture cum-demonstration method and with the help of different skills.

Teaching Point	Pupil's Activities	Blackboard Work
Meaning of decimal number System	P.T. explains the number system we use for counting is known as decimal number system. There are 10 digits from 0 to 9 that are used to represent quantity. Any quantity greater than 9 is represented by combination of two or more digits. For example, if we add 8 and 5, the result is 13 which is a combination of 1 & 3.	Decimal number System means base 10. i.e. System used for counting is known as decimal number System.
Other types of Number System	Besides decimal number system there are the other number systems also. They are :	

* Binary number System.
* Octal number System.
* Hexadecimal number System.

Binary Number System

Binary number system is used widely in computers. It has only two digits 0 and 1. So it is a Base 2 system. This system is used in computers as it has got many advantages over decimal number System.

Students will listen carefully.

State System

The computer is a two state system. All parts in it either remains in ON state or OFF state.

Students will write in their note books

Representation of ON and OFF.

In computer ON state is represented as 1 and OFF state as 0. So digits 1 and 0 are used, it is called Binary which means composed of two.

Partial Recapitulation

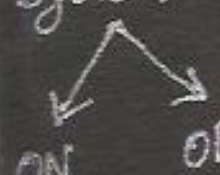
Q1. What do you mean by number System?
Q2. What is Binary number System?
Q3. What is representation of ON and OFF state in Computer System?

Students give response to the questions

Number System

* Binary Number System
* Octal number System.
* Hexadecimal number System

State System



Conversion from binary to decimal number

Since binary system is based on two digits 0 and 1, we take 2 as its base. For example 101.01. The positions of binary no. are

Digit	1	0	1	0	1
Positions	2nd	1st	0th	1st	2nd

You can increase the positions in both sides accordingly. So to convert 101.01 to decimal.

1 0 1 . 0 1

$1\times2^2+0\times2^1+1\times2^0+0\times2^{-1}+1\times2^{-2}$

$\Rightarrow 4+0+1+0+0.25=5.25$

$(101.01)_2=(5.25)_2$

Conversion from decimal to binary

To convert decimal to binary number, continuously divide the decimal number by 2. After each division write the remainder on the right hand side. Finally write the remainder from bottom to top. For eg. to convert $(7)_{10}$ to $(?)_2$

2 | 7	1 ↑
2 | 3	1
2 | 1	1

So 7 Decimal number = 111 (Binary No.)

Summarization

P.T. will summarize her topic that today we have studied

about "Binary Number System." Binary means two. So its Base is considered as 2. The computer has two states 1 and 0. "1" means "ON" state and "0" means "OFF" state.

Evaluation

Recapitulation:

Q1. What is decimal number system?

Q2. What is Binary number system?

Q3. How can we convert Binary to decimal number?

Instruction:

~~Ppt. would check the note-books of the students~~

Home work

Write and learn about Binary Number System.

LESSON No. .12.....

Date 27/02/2015 Duration of the period 30-35 mint.

Pupil Teacher's Name Kirti Pupil Teacher's Roll No. 1303

Class 10th Average Age of the pupils 14-16yr

Subject Computer Science Topic Data and its types.

(2) # Instructional Material

General Material:

Chalk, Dusters, Blackboard, Pointer etc.

Specific Material:

A chart showing different types of data.

(1) # Instructional Objectives

~~1. Knowledge:~~

(i) The students will be able to know about data.

(ii) The students will be able to recognize different types of data.

~~2. Understanding:~~

(i) The students will be able to classify different types of data.

(ii) The students will be able to discriminate between analog and digital data.

3. Application:

The students will be able to use data in their day to day life.

4. Skill:

The students will be able to analyse the data briefly and will be able to draws chart of analog and digital data.

Previous Knowledge Testing

Pupil Teacher Activities	Pupil Activities
1. What is Computer?	A computer is an electronic machine, that accepts data and process it & gives output.
2. What is Input device?	Through which data is entered to the computer.
3. Give any example of input device?	Keyboard, Mouse etc.
4. What is data?	Data means raw facts.
5. How many types of data are?	No Response.

Announcement Of the topic

Finding the students unable to answer the question, P.T. will announce the topic that today we will study about 'Data and its types'.

P.T. will develop her lesson with lecture cum-demonstration method and with the help of different skills.

Teaching Point	Pupil Teacher Activities	Blackboard work
Meaning of Data	P.T. explains that data is a collection of raw ~~facts~~ about any entity.	Data → Collection of raw facts.
Types of Data	Data is of two types * Analog data. * Digital data.	
Analog Data	In analog computers, the inputs are a continuous stream of electrical signals. It is monitored and processed continuously.	

Digital Data	In digital computers, all the inputs are broken down into discrete steps, a count of steps is kept and processed. This Processing is done in terms of binary representation of data i.e. 0 & 1 which is known as digital data.	Students will listen carefully
Partial Recapitulation	Q1. What is data? Q2. How many types of data are? Q3. What is digital data?	Students give response
Types of Digital Data	Digital data is further of two types: a) Numeric data b) Non-Numeric data.	
Numeric Data	The data which uses the value between 0 to 9 and arithmetic signs as +, −, *, % etc.	Students will write down in their note books.
Non-Numeric Data	The data which cannot be used for arithmatic calculations is known as non-numeric etc.	

Digital data means in the form of 0 & 1.

Types of Non-Numeric data	Non-numeric data is of two types: (i) Alphabetic data (ii) Alphanumeric data.	Students will listen carefully
Alphabetic data	It is the data which contains only alphabets is known as Alphabetic data.	Students will write down in their note books.
Alpha-numeric data	It is the data which contains alphabets, special symbol and no. digits is known as alphanumeric data.	

Summarization

P.T. will summarize her topic by saying that today we have studied "data and its types". Data is a collection of raw facts about any entity. Data is of two types i.e. Analog and Digital data. Digital data is of two types i.e Numeric and non-numeric data.

Evaluation

Recapitulation

1. What is types of data?
2. What is Analog data?
3. What is Numeric data?
4. What is Alphabetic data?

Inspection work

T.T. will check the note books of the students.

Home work

Write and learn about Data and its types.

LESSON No. ...13.....

Date...28/02/2015.....
Pupil Teacher's Name ...Kirti.....
Class.....10th.....
Subject...Computer Science.....

Duration of the period.....30-35mint.
Pupil Teacher's Roll No. .....1303.....
Average Age of the pupils.....14-16yr.....
Topic.....Data Processing.....

(2) Instructional Material

General Material:

Chalk, Duster, Blackboard, Pointer etc.

Specific Material:

A chart showing data Processing.

(1) Instructional Objectives

~~Knowledge:~~

(i) The students will be able to know about data and its processing.
(ii) The students will be able to recognize different operations in data processing.

~~Understanding:~~

(i) The students will be able to classify different operations.
(ii) The students will be able to discriminate among different data processing systems.

Application

The students will be able to use data processing in their daily life.

Skills

The students will be able to manipulate data effectively.

Previous Knowledge Testing

	Pupil Teacher Activities	Pupil Activities
*	What is computer?	It is an electronic machine that accepts data, process it & gives output.
*	What is data?	Raw facts & figures are known as data.
*	Data can be in which forms?	In the form of numbers alphabets, images, sound or combination of all.
*	What is information?	Processed form of data.
*	Which operations are involved in Data Processing?	No Response.

Announcement of the Topic

Finding the students unable to answer the question, P.T. will announce her topic by saying that today we will study about 'Data Processing'.

Presentation

P.T. will develop her lesson with lecture cum-demonstration method and with the help of different skills.

Teaching Point	Pupil-Teacher Activities	Pupil Activities	Blackboard Work
Meaning of data & Information	Data simply refers to raw facts and figures. These may be in the form of numbers, alphabets, images or sounds. Data needs processing to make it meaningful and useful when data is processed for some meaning it becomes information.	Students will listen carefully	Data → Raw facts Information → Processed form of data
Operations in Data Processing	Data Processing involves following operations. * Data Capture.		

* Data Manipulation
* Information Management

* Data Capture: It is the process of collecting or capturing data from a site or source. There are many methods of capturing data.

* Data Manipulation: Captured data, needs manipulation to produce information. Data can be manipulated in following ways:
  - classification
  - Sorting
  - Calculation.

⇒ Classification: Captured data are classified into different categories such as alphabetic, numeric or alpha-numeric.

⇒ Sorting: Captured data are arranged in a particular order ascending, descending known as sorting.

⇒ Calculations: Calculations are performed on data to manipulate it.

* Information Management: It is a very important aspect of data processing. Information is processed form of data which is stored for future use. So, management of this information is important.

Partial Recapitulation

1. What is informations?
2. Which operations are involved in Data Processing?
3. What is Information Management?

Students give response

Data Processing Systems

The various data processing methods are:-
* Batch Processing * Time Sharing
* Online Processing.

Batch Processing

In batch Processing, data is collected for a predetermined time period after which it is processed.

Online Processing

Online Processing is used when delay in data handling is not applicable.
For eg:- In banking System.

Time Sharing

It is form of online data processing where a computer is used by many users at the same time.
ex. School & College computer labs.

Summarization

P.T. will summarize her topic by saying that today we have studied about "Data Processing & Softwares." Different operations are involved in data processing such as Data

Capture, Data Manipulation and Information Management.

Evaluation

Q1. What is data processing?
Q2 What are different operations involved in Data processing?
Q3 What is On-line processing system?
Q4 What is Time sharing system?

~~P.T. I will check the note books of the students.~~

Home work

Write and learn about Data Processing.

LESSON No. ..14.....

Date 02/03/2015 Duration of the period 30-35 mint.

Pupil Teacher's Name Kirti Pupil Teacher's Roll No. 1303

Class 10th Average Age of the pupils 14-16yr

Subject Computer Science Topic Database and its components

(V) Instructional Material

General Material:

Chalk, Duster, Blackboard, Pointer etc.

Specific Material:

A chart showing components of a database.

(I) Instructional Objectives

(a) ~~Knowledge~~

(i) The students will be able to know about the database.

(ii) The students will be able to recognize different components of a database.

(b) ~~Understanding~~

(i) The students will be able to reason out why computer is useful for handling a database.

(ii) The students will be able to discriminate among different components of a database.

The students will be able to use databases in their day to day life.

The students will be able to create databases.

Previous Knowledge Testing

	Pupil Teacher Activities	Pupil Activities
1.	What is data?	Raw facts or material.
2.	What is information?	Processed form of data.
3.	What are different operations in Data Processing?	Data Capture, Data Manipulation, Information Management.
4.	What are data processing systems?	Batch Processing, Time Sharing, Online Processing.
5.	What is a database?	No Response.

Announcement of The Topic

Finding the students unable to answer the question, P.T. will announce the topic that today we will study. "Database and its components."

Presentation

P.T. will develop her lesson with lecture cum-demonstration method and with the help of different skills.

Teaching Point	Pupil Teacher Activities	Skill / Black Board Activity
Meaning of database	P.T. explains that database is a collection of inter-related data. The data remains in an organized order in a database. A database is a computer term for a collection of related information about a certain topic. Database helps you to organize related information in a logical manner for any access and retrieval.	Database is a collection of inter-related data.

Example of a database

Example of a database is the attendance register for any class maintained by the teacher. A Personal telephone directory is also an example of a simple database.

Students will listen carefully and write down in their note-books.

Example of database:
Class attendance register

Advantages of database

* Retrieving desired Information.
* Taking meaningful decision.
* Re-organising information.
* Processing information.
* Reduction of data redundancy.
* Data Security.

Partial Recapitulation.

Q1. What is a database?
Q2. Give any example of database?
Q3. State two advantages of databases?

Students have response.

Utility of Computer of a database

Computer is ideal for maintaining data bases because:

* it can hold large amounts of data.
* it can operate data quickly.
* it can update database quickly.
* it can easily summarise data.
* it can arrange data.
* it can easily search data.
* it can be useable easily.

Students will listen carefully

Components of a database

Data may be arranged in tables related to one another. Table contain various fields & records.

Field

A field is a place where different types of information are stored. Each field has a unique name. For e.g. name of all the students can be stored within one field with a "name" field name.

Record

A collection of related fields form a record. Data entered in related fields are grouped together to form a record. For e.g. all the fields of name, age, address etc. form the record of a student.

Table

A collection of related records form a table. A table is made up of rows and columns.

Summarization

P.T. will summarize her topic by saying that today we have studied about "data base & it's components." Data base is collection of interrelated data. The data remains in an organized order, in a database. Different components

of database are field, record, Table etc.

Evaluation

Q1. What is a database?
Q2 What are the advantages of a database?
Q3 What are the different components of a database?
Q4 What is a "table"?

Inspection work:
T. will check the note-books of the students.

Home work

Write and learn about data base and its components.

LESSON No. ...15.....

Date....03/03/2015.....
Duration of the period.....30-35 mint.....
Pupil Teacher's Name .....Kirti.....
Pupil Teacher's Roll No. .....B03.....
Class.....8th.....
Average Age of the pupils.....14-16yr.....
Subject.....Computer Science.....
Topic.....The Virus.....

(2) # Instructional Material

General Material:
Chalk, Duster, Blackboard, Pointer etc.

Specific Material:
A chart showing virus symptoms and its preventions.

(1) # Instructional Objectives

~~Knowledge~~

(i) The students will be able to know about virus.
(ii) The students will be able to recognize the virus infected program in their computer.

~~Understanding~~

(i) The students will be able to classify different types of virus.
(ii) The students will be able to discriminate among different types of virus.

③ ~~Application~~

The students will be able to prevent their programs from virus infection.

④ ~~Skill~~

The students will be able to use an antivirus Software and scan their system effectively.

Previous Knowledge Testing

Pupil Teacher Activities	Pupil Activities.
1. What is Computer?	A computer is an electronic device that accepts data, Process it & gives output.
2. What is data?	Raw facts are known as data.
3. What is Information?	Processed form of information.
4. What is Software?	A set of programmer is known as software.
5. Name any program that discrupts the functioning of a computer?	No Response

Announcement of The Topic

Finding the students unable to answer the questions, P.T. will announce the topic by saying that today we will study about 'The Virus'.

Presentation

P.T. will develop her lesson with lecture method; Inductive, deductive method and with the help of different skills.

Teaching Point	Pupil Teacher Activities	Pupil Activities	Black Board Work
Meaning	A computer virus is a program or a set of programs that disrupts the normal operation of a computer. Virus infects or destroys data.	Students will listen carefully and write down in their note books.	Full form of Virus → V → Vital I → Information R → Resources U → Under S → Size.
Full form of virus related terms	Its full form is Vital Information Resources Under Size. Trojan Horses, Worms and Spyware are some terms which are associated with virus programs.		

Trojan Horse

These are simple programs that pretend to be useful applications while they always do something destructive- most likely damage to a computer, like erasing a disk. A Trojan can spread only when it is copied to another system.

Students will listen carefully

Worm

It is a special type of virus programs that copies and multiplies itself by using computer networks and security flaws.

Malware

It is a software that enters into a computer and damages it without the user's knowledge. It can also steal important information.

Students will listen carefully and write in their Note-books

Types of virus

Virus can be classified into three types.

* Boot virus, * Program file virus
* Macro virus

Virus Symptoms

A virus can create Problem such as

* Frequent hanging of the system.
* Deleting or damaging files.
* Decreasing the speed of computer.
* Reformatting the hard disk.

Partial Recapitulation

Q1. What is a virus?
Q2 What is a worm?
Q3 Explain virus Symptoms?

Students give response

Types of Virus

1. Boot virus
2. Program file virus
3. Macro virus

Preventing virus Infection

following tips can be followed to prevent virus infection.

* Every PC should be equipped with some Anti-virus program.
* Always scan the Pen drive before copying files.
* Scan the hard disk twice a month.
* Take the back up of important files every day.

Anti-virus Software

Antivirus software are computer programs which are designed to identify, prevent and remove viruses from a computer. They perform the following tasks:

* Scan the computer files.
* Identify suspicious behaviour from any computer program which might indicate infection.

Some of the popular Anti-virus programs are

* Norton Antivirus * PC-Cilin
* AVG-Antivirus * Avira Antivirus.

Students will listen carefully and write in their note-books.

scanning & identifying suspicious behaviour

Summarization

P.T. will summarize her topic by saying that today we have studied about "virus & Antivirus program". Virus are the programs that infects our computer while Antivirus are the programs that prevents our computer from viruses/infection.

Evaluation

1. What is a virus?
2. What are types of virus?
3. What are the symptoms of virus?
4. How can we prevent computer from virus?

Inspection work:

P.T. will check the note-books of the students.

Home work

Write and Learn about virus and Antivirus program.

LESSON No. ...16....

Date 04/03/2015

Pupil Teacher's Name Kirti

Class 10th

Subject Computer Science

Duration of the period 30-35 mint.

Pupil Teacher's Roll No. 1303

Average Age of the pupils 14-16 yr.

Topic Operating System

(V) # Instructional Material

General Material:

Chalk, Duster, Blackboard, Pointer etc.

Specific Material:

A chart showing about Operating System.

(I) # Instructional Objectives

Knowledge:

(i) The students ~~will~~ be able to know about the operating System.

(ii) The students will be able to recognize about the types of Operating System.

Understanding:

(i) The students will be able to classify about operating System.

(ii) The students will be able to discriminate among different types of operating system.

Application:

The students will be able to use operating system in their day to day life.

Skill:

The students will be able to prepare chart.

Previous Knowledge Testing

Pupil Teacher Activities	Pupil Activities
1. What is computer?	Computer is an electronic device which accepts data, process it and gives output.
2. What is software?	A set of programs that performs a variety of functions is called a software.
3. What is Operating System?	No Response

Announcement of The Topic

Finding the students unable to answer the question, P.Ts will announce the topic by saying that today we will study about

'Operating System and its types'

Presentation

P.T. will develop her lesson with lecture cum-demonstration method and with the help of different skills.

Teaching Point	Pupil Teacher Activities	Pupil Activities
Operating System	An operating system acts as an interface between user and the computer hardware. It manages all the resources of the computer. It also controls the execution of application programs. It reduces the burden of the programmers by managing all the resources like input, output, memory and CPU also. It provides vital services to the users.	An operating System acts as an interface between user and the computer hardware. It manages all the resources of the computer.
Duties of an operating system	An operating system performs the following duties. 1. It manages all the resources and also allocates and deallocates different resources.	

② It manages different processes, which is to execute, wait or suspend. ③ It does processor management. ④ Interpretation of instructions and commands.

Classification of Operating System

Classification of Operating System.
1. Single User Operating System.
2. Multi User Operating System.

Singleuser operating System

It is ~~simplest~~ of all the operating System. It has a single processor, runs a single program and interacts with a single user at a time.

Multiuser Operating System

It supports multiple users to work simultaneously. There may be single processor or more processors to run multiple user's program.

Types of Operating System

Types of Operating System
① Multiprogramming OS
② Time Sharing OS
③ Multiprocessing OS
④ Multitasking OS
⑤ Real Time OS

Multiprogramming Operating System

In multiprogramming operating System, multiple programs are executed simultaneously. This type of operating system allows concurrent residency of many programs in the main memory of computer. This leads

Operating System
- Single User operating System
- Multi User operating System

Types of Operating System
- Multiprogramming o.s.
- Time Sharing o.s.
- Multiprocessing o.s.
- Multi-tasking o.s.
- Real Time o.s.

Time Sharing operating System

the best utilization of CPU time. In time Sharing systems, CPU time is divided into small slots and each process is provided a slot or processing time of CPU. In Timesharing system, a large number of user has direct access to the computer

Multiprocessing operating System

Multiprocessor computer systems are the systems with more than one CPU. The operating system that support multiple CPU's in one computer is called multiprocessor Operating System. In this O.S, a single job may contain two or more independent tasks that can execute concurrently in multi-programming mode.

Multitasking operating System.

Real Time operating System

Real time systems are used for process control in manufacturing plants, assembly lines, robotics and complex physical systems such as the space station. Real-time systems have severe timing constraints.

Summarization

today we P.T. will summarize her topic by saying that " have studied about "Operating System"

Evaluation

Definitation:

1. What is Operating System?
2. Explain Types of operating System?
3. What is Multiprogramming Operating System?
4. What is Multiprocessor operating System?

Instruction:

P.T. will check the note-books of the students.

Home work

write and learn about Operating System and its types.

LESSON No. ..17.....

Date....07/03/2015.....
Duration of the period....30-35 mint.....
Pupil Teacher's Name ....Kirti.....
Pupil Teacher's Roll No. .....1303.....
Class.....9th.....
Average Age of the pupils.....14-16 yrs.....
Subject..Computer Science..
Topic...Programming language.....

(2) Instructional Material

General Material:

Chalk, Duster, Black-board, Pointer etc.

Specific Material:

A chart showing about programming language.

(1) Instructional Objectives

~~Knowledge~~:

(i) The students will be able to know about the programming language.

(ii) The students will be able to recognize about the programming language.

~~Understanding~~:

(i) The students will be able to discriminate between different programming languages.

(ii) The students will be able to classify different programming language.

Application:

The students will be able to use programming language in their daily life.

Skill:

The students will be able to analyse the different programming language.

Previous Knowledge Testing

Pupil Teacher Activities	Pupil Activities
1. What is computer?	A computer is an electronic machine, that accepts data and process it & give output.
2. What are input units?	Through which data is entered to the computer.
3. Give any examples of Input devices?	Keyboard, Mouse, Light Pen etc.
4. What are Programming language?	No Response.

Announcement Of The Topic

Finding the students unable to answer the

question, P.T. will announce her topic by saying that today we will study about Programming Language.

P.T. will develop her lesson with lecture cum-demonstration method and with the help of different skills.

Teaching Point	Pupil Teacher Activities	Pupil Activities
Introduction	A programming language used for expressing a set of instructions in a program. Each programming language consists of necessary symbols, character and grammer rules. It is used to communicate with computers through the programme. Popular used programming languages are BASIC, FORTRAN, Pascal, C, C++, ADA, PROLOG, Visual Basic, JAVA etc.	A programming language used for expressing a set of instruction in a program. Programming languages are: BASIC, Pascal, FORTRAN, C, C++, PROLOG, JAVA etc.
Generation of Programming Language	There are different generations of programming languages. These are: (i) First Generation Language (ii) Second Generation Language	

(3) Third Generation language
(4) Fourth Generation language

First Generation language.

First Generation language was Machine language. Machine language is based on binary digits. Computer can understand only a binary based language.

Advantage

(1) Program written in Machine language can be directly executed on a computer.
(2) No transaction required.
(3) Less execution time.
(4) Close to system

Disadvantages

(1) Machine language program is difficult to write and understand. (2) Program written in machine language is machine dependent. (3) Difficult to detect error

Second Generation Language

Second Generation language is also known as Assembly language. It is based on symbolic codes, for examples: ADD, LOAD, STORE, SUB, MUL, PRINT etc.

Advantages

(1) More convenient than machine language (2) Easy to find errors. (3) Easy to write & understand.

Disadvantages

(1) Machine dependent (2) High Programming Cost (3) Still difficult

Types of programming Language:-

- First Generation language
- Second Generation language
- Third Generation language
- Fourth Generation language

to understand than other modern languages.

Third Generation Language

These languages are high level languages. The languages like COBOL and FORTRAN are third Generation Languages.

Advantages

① More understandable than low level languages ② Easy to detect errors. ③ Low programming cost ④ High level languages are English like languages, and east to learn.

Dis-advantage

① Programs written in High level languages cannot be directly executed on computer. ② More execution time required to run high level language program.

Fourth Generation Language

Fourth Generation languages were created to increase the productivity of the programmer. It provides different tools for creation of different application. Examples of 4GLs are; dBASE III Plus, ORACLE, FOXPRO etc.

Advantages

① Increase the productivity of programmer. ② Increase the speed of writing programs. ③ Simple to understand and learn.

Dis-advantages

① It needs translation into machine language program.

Summarization

P.T. will summarize her topic by saying that today we have studied about 'Programming Languages'.

Evaluation

Recapitulation:

Q1. Describe Programming Language?
Q2. What are the generation of Programming language?
Q3. Describe Second Generation language?
Q4. Describe Fourth Generation language?

Inspection:

Sir/Ma'am will check the note-books of the students.

Home work

Write and learn about Programming language

LESSON No. ...18.....

Date 09/03/2015 Duration of the period 30-35 minute

Pupil Teacher's Name Kriti Pupil Teacher's Roll No. 1303

Class 9th Average Age of the pupils 14-16yr

Subject Computer Science Topic Language Processors

(V) Instructional Material

General Material:

Chalk, Duster, Black-board, Pointer etc.

Specific Material:

A chart showing about language Processors

(I) Instructional Objectives

~~Knowledge:~~

(i) The students will be able to know about language Processors.

(ii) The students will be able to recognize language Processors.

~~Understanding:~~

(i) The students will be able to classify different language Processors.

(ii) The students will be able to discriminate different language Processors.

Application

The students will be able to use these different language processors in their daily life

Skills

(i) The students will be able to analyse different language processors.

(ii) The students will be able to prepare charts.

Previous knowledge testing

Pupil Teacher Activities	Pupil Activities
1. What is computer?	A computer is an electronic device that accepts data, process it & gives output.
2. What is data?	Raw facts are known as data.
3. What is Information?	Processed form of information
4. What is Input Units & examples.	Through which data is entered to the computer. Mouse, keyboard etc.
5. What is language Processors?	No Response.

Announcement of The Topic

Finding the students unable to answer the question, P.T. will announce her topic by saying ~~that~~ today we will study about Language Processors.

P.T. will develop her lesson with lecture cum-demonstration method and with the help of different skills.

Teaching Point	Pupil Teacher Activities	Pupil Activities	~~Black Board~~
Introduction	The computer does not understand any language other than own machine language, it becomes necessary to process a program written by a programmer so as to make it understandable to the computer. This processing is generally performed by another program, language processors. There are different language processors, these are: * Language Translators		

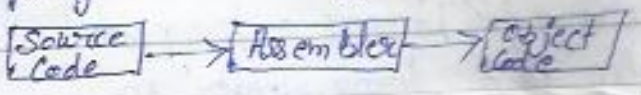
Language Translator

Computer can understand only machine language. So program written in any language other than machine language is first to be translated in machine language. This work is performed by language translators. Translators of programming languages are classified into groups depending on the nature of the source language accepted by them. These are as follows :-

* Assembler
* Compiler
* Interpreter

Assembler

An assembler accepts an assembly language program and then translates it into machine language. An assembly is a low level programming language which is machine dependent. Different assemblers are required for different Assembly language programs on different machines.



Assembler can translate only assembly language program.

Compiler

A compiler translates program written in high level language into machine language. It translates the whole program at one. While

compiling it detects syntactical and semantic errors in the program in high level language. It takes more time to translate.

[Source Code] → [Compiler] → [Object Code]

Interpreter An Interpreter also translates High Level Language program into Machine language. But it differ from compiler that it translate the program line by line. It takes more time to translate than compiler. It converts source program written in High Level Language.

P.T. will summarize her topic by saying that today we have studied about **Language Processors**. For Language Processor, language translators are used. Following language translator are Assembler, Compiler, Interpreter.

Evaluation

~~Recapitulation:~~

1. What is language Processors?
2. what is language translator?
3. what is Compiler?
4. Explain Interpreter?

~~Inspection:~~

~~T. To will check the note-books of the students.~~

Home work

Write and learn about language Processors.

LESSON No. ...19.....

Date...10/03/2015.....
Duration of the period.....30-35 mint.....

Pupil Teacher's Name .....Kirti.....
Pupil Teacher's Roll No.....1303.....

Class.....10th.....
Average Age of the pupils.....14-16 yrs.....

Subject.....Computer Science.....
Topic.....Network Topologies.....

(2) # Instructional Material

General Material:

Chalk, Duster, Blackboard, Pointer etc.

Specific Material:

A chart showing different Network Topologies.

(1) 

~~Knowledge~~

(i) The students will be able to know about Network Topologies.
(ii) The students will be able to recognize different types of Topologies.

~~Understanding~~

(i) The students will be able to classify different network topologies.
(ii) The will be able to discriminate among different network topologies.

Application: The students will be able to use different network topologies in their day to day life.

Skill: The students will be able to analyse different network topologies.

Previous Knowledge Testing

	Pupil Teacher Activities	Pupil Activities
1.	What the process of sharing information is called?	Communication
2.	What is Network?	A computer network is an interconnection of computers that are able to share their resources
3.	What are the types of Network	LAN, MAN, WAN
4.	what is Network Topologies?	No Response.

Announcement Of The Topic

Finding the students unable to answer the question, P. To will announce her topic by saying that today we will study about Network Topologies.

Presentation

P. To will develop her lesson by lecture cum-demonstration method and with the help of different skills.

Teaching Point	Pupil Teacher Activities
Network	A computer network is a collection of computers and devices connecting together by a communication system with main objectives of communications and sharing of various hardware and software resources like printers, file, programs and so on.
Topologies	Topologies is the geometric arrangement of the computers

Pupil Activities

Topologies is the geometric arrangement of the computers in a work

in a woark. Common topologies include star, ring and bus.

Common Topologies

* Star Network Topology
* Ring Topology
* Bus Topology

Star Network

Star network is frequently used to connect one or more small computers or devices to a large host computer or CPU. Star network is frequently used in a LAN to connect several microcomputers to a central unit that works as a communications controller.

Advantages

① Easy to service ② One device per connection ③ Centralized control ④ Simple access protocols.

Disadvantages

① long cable length ② Difficult to expand ③ central node dependency.

Ring Network

The ring Network is a local-area network (LAN) whose topology is a ring - can be as simple as circle or point-to-point connections of computer at dispersed locations, with no central host computer or communications controller.

Advantages	① Short cable length ② No wiring closest space required ③ Suitable for optical fibers.
Disadvantages	① Node failure causes network failure ② Network reconfiguration is difficult
Bus Topologies	This consists of a single length of the transmission medium onto which the various nodes are attached. The topology is used in traditional data communication network where the host at one end of the bus communicates with several terminals attached along its length. Bus Topology is one of most popular topology.
Advantages	① Short cable length ② Easy to expand ③ Resilient Architecture
Disadvantages	① Fault diagnosis is difficult ② Fault isolation is difficult ③ Repeater Configuration ④ Nodes must be intelligent.

P.T. will summarize her topic by saying that today we have studied about Network

Topalogies.

Evaluation

~~Recapitulation :~~

1. What is Topalogies ?
2. What are common topalogies ?
3. Explain Bus Topalogies ?
4. Explain Ring Network topalogy.

~~Inspection :~~

~~1. To verify check the note-books of the students.~~

Home work

write and learn about Network Topalogies.

LESSON No. 20

Date 11/03/2015 | Duration of the period 30-35 mint.

Pupil Teacher's Name Kirti | Pupil Teacher's Roll No. 1303

Class 10th | Average Age of the pupils 14-16 yrs.

Subject Computer Science | Topic E- commerce

(2)

Instructional Material

General Material:

Chalk, duster, Black-board, Pointer etc.

Specific Material:

A chart showing about applications of E- Commerce.

(1)

Knowledge

(i) The students will be able to know about E- Commerce.

(ii) The students will be able to recognize different applications of E- commerce.

Understanding

(i) The students will be able to classify E- Commerce.

(ii) The students will be able discriminate applications of E- commerce.

Application

The students will be able to use E-commerce in their day to day life.

Skill

The students will be able to do trade through E-commerce.

Previous Knowledge Testing

Pupil Teacher Activities	Pupil Activities.
1. What is Computer?	It is an electronic device that accepts data, process it and gives output.
2. What is Network?	A computer network is an interconnection of computers that are able to share their resources.
3. What is E-mail?	Electronic Mail, commonly called E-mail.
4. What is E-commerce?	No Response.

Announcement of The Topic

Finding the students unable to answer the

question, P.To will announce the topic by saying that today we will study about E-Commerce.

Presentation

P.To will develop her lesson with lecture cum-demonstration method and with the help of different skills.

Teaching Point	Pupil Teacher Activities	Pupil Activities
E-commerce	Electronic commerce or E-commerce is the trade of products and services by means of the Internet or networked computers. It is also said the E-commerce i.e transaction on the web if follows the same procedure as normal commerce. All the products are services are bought in exchange of money. The payment has to be done using a credit card. E-commerce has led to reduced costs as far as selling is concerned:	Electoonic commerce is the trade of products and seorices by means of the Internet or networked omputers
Application of E-commerce	Applications of E-commerce are: * E- shopping.	

* E- Banking
* E- Reservation
* E- Marketing
* E- Learning
* E- Groups

E-Shopping The process of shopping done over the internet is called online shopping. Both products and services can be purchased by online shopping. Goods can be ordered, sold, purchased. Some of the shopping sites are ebay.com, amazon.com etc.

E-Banking E- banking term is used for Internet banking. This is the way of performing bank transactions using Internet. A customer can do a number of things using E- banking such as he check the amount in his account, make fixed deposit, transfer money, apply for loans, make the payment of bills etc.

E-Reservation E- Reservation system is a web reservation application that allocates resources to different people at different times. Using internet we can check any time the availability of seats in bus

Application of E-Commerce

* E-Shopping
* E-Banking
* E-Reservation
* E-Marketing
* E-Learning
* E-Groups

trains and aircraft. Some useful sites for e-reservation are www.yatra.com, www.irctc.co.in.

E-Marketing In highly competitive market, it is very difficult for a businessman to survive without marketing. The proper advertisement of products is necessary to attract the attention of a customer. The popular media of advertisement are newspapers, televisions, radio, magazines etc and above all internet, which is very economical and globally used method. So various ways used for marketing using internet is called e-marketing.

E-Learning It is a type of technology supported education or learning. E-learning is defined as a planned teaching that uses a variety of technologies mainly, Internet or computer based to reach the learners.

E-Groups E-groups.com was an e-mail list management website. The site allowed users to create their own mailing lists and allowed others to signup for member ship on the list. In e-groups people know each others interests and share information on those topics, share messages and photo albums.

Summarization

P.T. will summarize her topic by saying that today we have studied about E- commerce and its application

Evaluation

1. What is E- Commerce?
2. What are the applications of E- Commerce?
3. What is E- Banking?
4. What is E- Marketing?

~~Evaluation~~

P.T. will check the Note- Books of the students.

Home work

Write and learn about E- commerce and its applications.

DISCUSSION LESSON

LESSON No. ...2.....

Date 12/03/2015 Duration of the period 30-35 mint

Pupil Teacher's Name Kirti Pupil Teacher's Roll No. 1303

Class 9th Average Age of the pupils 14-16 yrs

Subject Computer Science Topic Output devices

(2) Instructional Material

General Material:

Chalk, Duster, Blackboard, Pointer etc.

Specific Material:

A chart related to the output devices.

(1) Instructional Objectives

~~Knowledge~~

(i) The students will be able to know about different output devices.

(ii) The students will be able to recognize all the output devices.

~~Understanding~~

(i) The students will be able to classify

different output devices.

(iii) The students will be able to discriminate among different printers.

~~Application~~

The students will be able to use these output devices in their daily life.

~~Skill~~

The students will be able to use different printers.

Previous Knowledge

Pupil Teacher Activities	Pupil Activities
1. What is computer?	A computer is an electronic machine that accepts data process it and gives output.
2. How can we enter data to the computer?	Through Input devices.
3. Name Some Input devices?	Keyboard, Mouse etc.

4. What do you mean by output devices?	Output devices are those through which data is displayed as result.
5. Give some examples of output devices.	No Response.

Announcement of The Topic

Finding the students unable to answer the question, P.T. will announce the topic by saying that today we will study about "Output devices".

Presentation

P.T. will develop her lesson with lecture cum-demonstration method and with the help of different skills.

Teaching Point	Pupil Teacher Activities	Pupil Activities	~~Black-Board~~ Work
Meaning of output devices	Output devices are those devices that help us to produce output as result data on the computer screen or on the paper	Students will ~~listen~~ carefully	
Examples of Output devices	These are some output devices such as printers, Plotter, Linker, Visual Display unit (VDU), Speakers		
Types of Output Product	The output on the screen is referred to as the Soft output as it is not permanent. In order to preserve the output we produce it on paper using a printer. This output on paper is referred as the hard copy.		
VDU	A VDU is the most common and infact a very essential output		

Output Devices

* VDU (Visual Display Unit)
* Printer
* Plotter
* Speaker

device used with every computer system. It is like a television set with the only difference that it receives its signals from the CPU. It is also called a Monitor. The quality of image produced by a monitor is termed as Resolution. The screen is divided into tiny dots called Pixels.

Students will listen carefully and write in their note-books

Partial Recapitulation

1. What do you mean by output devices?
2. What is meant by Soft copy?
3. What is moniter?

Students give proposse

Printer

Printers are the most common output device. They are used to produce output on the paper is called Print-out or hardcopy. A Printer has following features:

* Speed is measured in terms of Character per second & line per minute.
* it implies the total number of characters recognized

by the printer.

Plotters These output devices are used to print graphs, maps, mechanical drawing etc. The drawings can be multicoloured or black & white depending upon the ink used. These are useful in CAD.

Students will write in their note-books.

Speakers In order to get audio output, speakers are used. Sound cards are used to convert the digital signals into analog signals which are then fed to the speakers. Speakers produce the sound from the electrical signals received.

Summarization

P.T. will summarize her topic by saying that today we have studied about "Output Devices". Output can be of two types:

Soft copy and Hard copy output. There are many output devices like Printers, Plotters, VDU, speakers etc.

Evaluation

Evaluation:

1. What is output device?
2. What do you mean soft copy output?
3. What do you mean by VDU?
4. What do you mean by speakers?

Inspection of work:

P.T. will take round in the class to check the note-books of the students.

Home work

Write and learn about output devices.

OBSERVATION LESSONS

Observation Lesson No. 1

Date 26/02/15 | Duration of the period 30-35 Mint.

Pupil Teacher's Name Swati | Pupil Teacher's Roll No. 1450

Class 8th | Average Age of the pupils 13-14 years

Subject Physical Science | Topic Pollution

1. P.T. has asked some questions from the students to check their previous knowledge. P.K. Testing was appropriate. 2. Announcement to the topic was done at proper time. 3. Lesson was delivered with the help of lecture cum demonstration method and with the help of different skills. 4. P.T. was fully confident. 5. P.T. voice was loud and clear. 6. Explaination of the topic was appropriate 7. Examples were given 8. Movement and gesture were not according to the situation 9. Students were taking interest in the topic. 10 Recapitulation was done by P.T. 11. Home work was assigned to the students.

Sign. of Pupil Teacher | Sign. of Supervisor

Observation Lesson No. 2

Date 27/02/15 | Duration of the period 25 mint.

Pupil Teacher's Name Poonam | Pupil Teacher's Roll No. 1496

Class 7th | Average Age of the pupils 10-14 years

Subject Computer Science | Topic Desktop

1. P.T. has asked some questions from the students to check the previous knowledge of the students. P.K. testing was good. 2. Announcement of the topic was done at right time. 3. Lesson was delivered with the help of lecture method and with the help of different skills using chart. 4. P.T. was fully confident. 5. P.T.'s voice was loud and clear 6. Explaination of the topic was appropriate. 7. Student were taking interest in the topic. 8. Movement and gestures were according to situation. 9. Blackboard work was appropriate. 10. Class was fully controlled by P.T. 11. Recapitulation was not done by P.T. 12. Home work was assigned to the students.

Sign. of Pupil Teacher | Sign. of Supervisor

Observation Lesson No. 3

Date 28/02/15

Pupil Teacher's Name Poonam

Class 8th

Subject Computer Science

Duration of the period 25min.

Pupil Teacher's Roll No. 1496

Average Age of the pupils 13yr.

Topic Input Unit

1. P.T. has asked some questions from the students, Students gave response and P.K. testing was appropriate. 2. Announcement of the topic was at right time. 3. lesson was delivered with the Inductive Deductive Method and with the help of different skills. 4. P.T. was fully confident. 5. P.T. voice was audible in the class. 6. Explaination of the topic was appropriate. 7. Movement was according to the situation. 8. Chart used by P.T. was very effective. 9. Paritial interaction with class was made. 10. Recapitulation by P.T. was done appropriately. 11. Home work was given to the students.

Sign of Pupil Teacher

Sign. of Supervisor

Observation Lesson No. 4

Date 02/03/15

Pupil Teacher's Name Swati

Class 8th

Subject Physical Science

Duration of the period 30 mint

Pupil Teacher's Roll No. 1450

Average Age of the pupils 14yr.

Topic Digestive System

1. P.T. has asked some questions from the students to check their Previous Knowledge. P.K. Testing was appropriate. 2. Announcement of the topic was done appropriately. 3. lesson was delivered with illustration method and with the help of different skills. 4. Chart used by P.T. was effective. 5. P.T. was fully confident. 6. Pupil interaction was good. 7. P.T.'s voice was properly audible. 8. Class was under control. 9. Movement and gestures were according to situation. 10. Summarization was not done by P.T. 11. Home work was assigned to the students.

Sign of Pupil Teacher

Sign. of Supervisor

Observation Lesson No. 5

Date 03/03/15 | Duration of the period 25 min.

Pupil Teacher's Name Reenu | Pupil Teacher's Roll No. 1486

Class 8th | Average Age of the pupils 13 yr

Subject Computer Science | Topic MS-Excel

1. P.T. has asked some questions from the students to know the previous knowledge. P.K. Testing was appropriate. 2. Announcement of the topic was done at proper time. 3. Lesson was delivered with lecture method and with the help of different skills. 4. P.T. was fully confident. 5. P.T.'s voice was loud and properly audible. 6. Interaction with whole class was very good. 7. Class was under control. 8. Movement and gestures were according to situation. 9. Blackboard work was appropriate. 10. Chart was not used by P.T. 11. Home work was given to the students.

Sign. of Pupil Teacher

Sign. of Supervisor

Observation Lesson No. 6

Date 04/03/15 | Duration of the period 30 mint.

Pupil Teacher's Name Jhumpa | Pupil Teacher's Roll No. 1329

Class 7th | Average Age of the pupils 13 yr.

Subject Sanskrit | Topic हिंदी श्लोक

1. P.T. has asked some questions from the students, Students gave response. P.K. testing was appropriate. 2. Announcement of the topic was done at proper time. 3. Lesson was delivered with lecture method. 4. No teaching aid was used by P.T. 5. Class was under control. 6. P.T. voice was not properly audible. 7. Movement was according to the situation. 8 Summarization of the topic was done by P.T. 9. Partial Recapitulation was done by P.T. 10. Recapitulation was done by P.T. at last. 11. Home work was given to the students.

Sign. of Pupil Teacher

Sign. of Supervisor

Observation Lesson No. 7

Date 07/03/15

Pupil Teacher's Name Indu

Class 7th

Subject Life Science

Duration of the period 30 minute

Pupil Teacher's Roll No. 1497

Average Age of the pupils 13 yr.

Topic Human digestion System

1. P.T. has asked some questions from the students to check the previous knowledge of the students. P.K. Testing was appropriate.
2. Announcement of the topic was at proper Time. 3. Lesson was delivered with questioning cum illustration method and with the help of different skills. 4. P.T. was fully confident. 5. Class was under control. 6. P.T's voice was properly audible. 7. Movement and gestures were according to situation. 8. Interaction with the class was adequate. 9. Evaluation was not made by P.T. 10. Home work was assigned to the students.

Sign. of Pupil Teacher

Sign. of Supervisor

Observation Lesson No. 8

Date 09/03/15

Pupil Teacher's Name Swati

Class 6th

Subject Physical Science

Duration of the period 30 minute

Pupil Teacher's Roll No. 1450

Average Age of the pupils 13 yr.

Topic Light

1. P.T. has asked some questions from the students to check their previous knowledge. P.K. Testing was adequate. 2. lesson was delivered with the help of lecture method. 4. P.T.'s voice was fully audible. 5. Class was under control. 6. Chart used by P.T. was very effective. 7. Blackboard work was not appropriate. 8. Movement and gestures were according to situation. 9. Explaination of topic was upto mark. 10. Recapitulation was done by P.T. 11. Home work was given to the students.

Sign. of Pupil Teacher

Sign. of Supervisor

Observation Lesson No. 9

Date 10/03/15 Duration of the period 25mint

Pupil Teacher's Name Poonam Pupil Teacher's Roll No. 1496

Class VII th Average Age of the pupils 13yr

Subject Computer Science Topic Multimedia

1. P.T. has asked some questions from the students. Students gave response. P.K. Testing was appropriate. 2. Announcement of the topic was at the proper time. 3. Lesson was delivered with the help of lecture method and with the help of different skills with the use of Chart. 4. P.T.'s voice was audible. 5 Class was under control. 6. Pupil's interaction was very good. 7. Movement and gestures were according to situation. 8. Explaination of the topic was appropriate. 9. Blackboard work was not appropriate size of words written on the blackboard was not proper. 10. Home work was given to the students.

Sign. of Pupil Teacher Sign. of Supervisor

Observation Lesson No. 10

Date 11/03/15 Duration of the period 25mint

Pupil Teacher's Name Poonam Pupil Teacher's Roll No. 1496

Class VII th Average Age of the pupils 13yr

Subject Computer Science Topic E-mail.

1. P.T. has asked some questions from the students to check the previous knowledge. P.K. testing was good. 2. Announcement of the topic was at the right time. 3. Lesson was delivered with the lectured method only. 4. P.T. was fully confident. 5. P.T.'s voice was clear. 6. Explanation of the topic was appropriate. 7. Movements and Gestures were according to the students. 8. B.B. work was good. 9. Class was fully controlled by P.T. 10. Recapitulation was done by P.T. 11. Home work was assigned to the students.

Sign. of Pupil Teacher Sign. of Supervisor

SCHOOL REPORT

Introduction :-

Development of a nation directly depends upon the educated population. In a country like India providing education to every individual is very challenging act Regulatory bodies in India are trying to facilitate rural population with primary, middle and higher secondary schools. luckily I got a chance to practice and learn teaching methods at [redacted] Hans Raj Memorial Sr. Sec. School, kilai.

Building :-

All rooms are spacious properly ventilated and have good light facility. Every room has a blackboard, two ceiling fans, electric tube light and good furniture. There is a principal office, kitchen and staff room also. In the school, there is a play-ground and assembly stage. School has facility of clean drinking water for everyone.

SCHOOL REPORT

Staff

School Staff members are very amiable and very co-operative. All the faculty members are very hard-working and dedicated to their work. They all are qualified and experienced. They all are very co-operative. They helped me in all possible ways during our teaching practice of ~~Fifteen~~ days. The discription regarding teachers with there names and qualification is as follows:

शोभा जी — M.A., B.Ed
जयप्रकाश — M.Sc., M.Tech, B.Ed
Ram Chander — C.PEd, B.PEd
Roshni — M.A. (English), B.Ed.
जयकरण — M.A. (Hindi), B.Ed.
सुनीता — M.Com, B.Ed
राजबाला — M.A (Sanskrit), B.Ed.

Time-Table

Time-Table was constructed systematically according to the need and interest of the students. Morning Assembly starts at 9:00 am which

SCHOOL REPORT

was set for twenty minutes. Difficult subjects were settled in morning time mainly before the recess. Everyday students were provided an activity period to make them and feel fresh. On every Saturday, a special activity programme known as 'Bal Sabha' is organized in the school in which students are given a chance to shows their talent through various Games and competitions.

Co-Curriculas Activities

Faculty members are very experienced. They have included various kind of Co-curricular activities in the time-table. They organize competition like poem Recitation, Singing, speech, painting, essay Writing, sports Activities for the all round development of all the students.

Surrounding

During my practice, I found school environment was fully maintained and disciplined. Students are fully respectfully towards their teachers. School is surrounded with Green fields. There

SCHOOL REPORT

are some shops near the school where students purchase some eatables and necessary stationary materials. The whole School surrounding is free from any source of noise which is good for the students.

Outstanding Features

Mid-Day Meal provided to the students is also of good quality. This school has good working staff for making food for the students in a suitable manner. Students from all castes sit together and enjoy the meal together.

Suggestions for Improvement

School is well maintained but there is need to improve the condition of Blackboards and walls of some classes. Some students need special Guidance and motivation who are lagging behind from some other students. Flower plants should be planted to add more charm to the environment in the school.