CHAPTER 1

Computer History & Development

Let's Do This

A. Multiple Choice Questions.

1. (a) 2. (b) 3. (b) 4. (a) 5. (b)

B. State true 'T' or false 'F'.

1. F 2. T 3. T 4. T 5. T

C. Fill in the blanks.

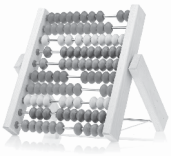
1. Abacus 2. Charles Babbage
3. Integrated Circuits 4. transistors 5. first

D. Write full forms of the following.

1. ENIAC : Electronic Numeric Integrator and calculator
2. UNIVAC : Universal Automatic Computer
3. ABC : Atanasoff- Berry Computer
4. IBM : International Business Machine
5. VLSI : Very Large scale Integration

E. Answer the following questions.

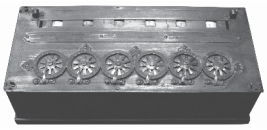
1. The earliest device that qualifies as a digital computer is the 'ABACUS'. It was developed about 5000 years ago in China. This device allows the user to represent numbers by the position of beads on a rack. Simply addition and subtraction can be carried out rapidly and efficiently by positioning the beads on the rack appropriately.



Abacus

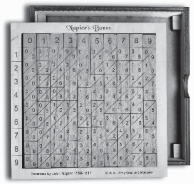
2. Charles Babbage is known as the ' Father of computers'. He invented difference engine.
3. Instead of using individual transistors, the computers made in the third generation used integrated circuits technology. As compared to second-generation computers, 3rd generation computers were cheaper in price, smaller in size, less heavy in weight, faster in speed and more efficient.

4. **(a) Pascaline** : The first calculator was invented by **Blaise Pascal** in 1642. It was called Pascaline. With the help of this machine, one could perform addition and subtraction only. It was a rectangular box with wheels.



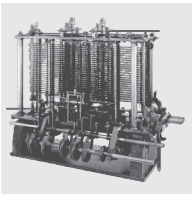
Pascaline

(b) Napier Bonses : In 1614, Sir John Napier invented a calculating device called Napier's Bones. It was made with a set of rectangular rods. One could perform multiplication and division besides, addition and subtraction with this device.



Napier's Bones

(c) Analytical Engine : The analytical engine was a proposed digital mechanical general-purpose computer designed by English mathematician and computer pioneer Charles Babbage. It was first described in 1837 as the successor to Babbage's difference engine, which was a design for a simpler mechanical calculator.



Analytical Engine

(d) Fifth Generation Computers :

- These computers are still being developed.
- They have very high storage capacity, speed, and efficiency.
- Computers of this generation are often called **supercomputers**.
- Computers are being developed in such a way that they can think on their own, like human beings do. This is called **artificial intelligence**. Robots work on this technology.

5.

- These computers are small is size and cost less.
- They are usually designed for personal use, therefore, they are also called **Personal Computers**.
- They are designed for use by a single user at a time.

Desktop

- They are mainly used in homes, schools, offices, banks, etc. These computers are given different names according to their usage as Desktop computers, Laptops and Tablet.

Fun Activity

1. Which generation of computers is the best according to you. Write four points in favour of your argument.

Best generation of computer is Fifth Generation

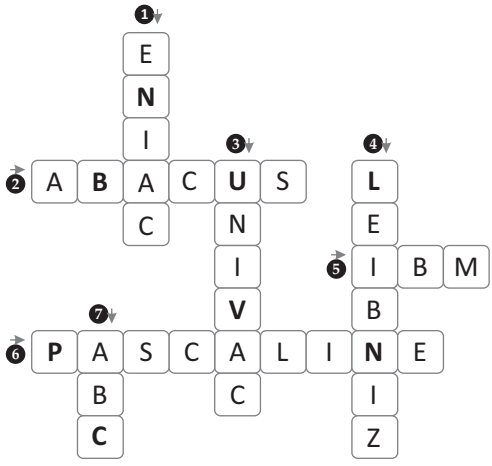
A. These computers are still being developed.

B. They have very high storage capacity, speed, and efficiency.

C. Computers of this generation are often called **supercomputers**.

D. Computers are being developed in such a way that they can think on their own, like human beings do. This is called **artificial intelligence**. Robots work on this technology.

2. Solve the crossword puzzle with the help of the hints given below.



HOTS

The belief that Artificial Intelligence (AI) can or soon will match human intelligence, known as Artificial General Intelligence (AGI), is a common misconception. In reality, the capabilities of AI and human intelligence are distinct, each with its own strengths and weaknesses.

CHAPTER 2

Advanced Features of MS-Word

A. Multiple Choice Questions.

1. (c) 2. (a) 3. (c) 4. (b)

B. State true 'T' or false 'F'.

1. T 2. F 3. F 4. T 5. T

C. Fill in the blanks.

1. Insert 2. Orientation 3. Shapes
4. Toggle 5. Indentation

D. Write one word for the following.

1. Shapes 2. Find 3. Header 4. Footer 5. Indentation

E. Answer the following questions.

1. Adding pictures to the document helps you illustrate the information in a better way. Word allows you to add pictures from your computer or the web directly into your document.

   See topic 'Inserting Online Pictures' on book page no- 15.

2. **Header** is the top margin area of the document.

   Follow the given steps for inserting header:

   Step 1 : Click on **Insert** tab.

   Step 2 : Click on the **Header** button.

   Step 3 : A list of header styles, will appear. Select the required header style.

3. The **Find** command in MS-Word is used to find or search a particular word or text in a document.

   To find text in a document, follow the given steps:

   Step 1 : Click on the **Home** tab. and then, click on the **Find** in **Editing** group. A drop-down menu displays.

   Step 2 : Click on **Find** option. The **Navigation** pane appears on the left side.

   Step 3 : Type a word in the search box. The word (searched) gets highlighted.

4. The page orientation is the property to set the printing direction of text.

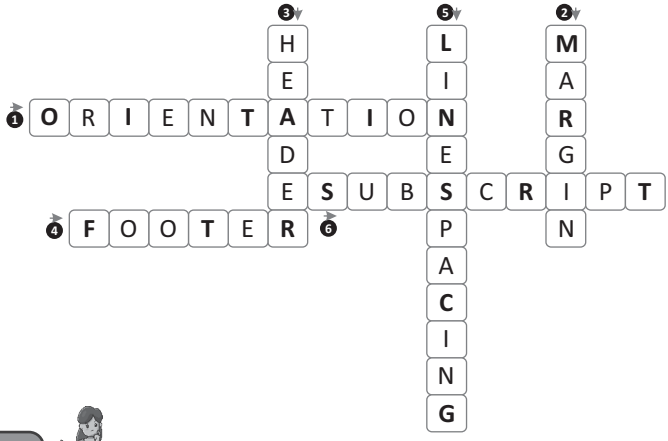
   The two kinds of page orientation in Word are as follows.

   (a) Portrait (the default one) (b) Landscape

   The only difference between the two orientations is that in portrait, the page height is more than the page width and in landscape, the page height is lesser than the page width.

5. See topic 'Inserting Columns Break' on book page no- 19.

Fun Activity



HOTS

Shobhit should use insert column, column break and line spacing features.

3 Creating Tables and Mail Merge in MS-Word 2016

Let's Do This

A. Multiple Choice Questions.

1. (c) 2. (a) 3. (b) 4. (a) 5. (b)

B. State true 'T' or false 'F'.

1. T 2. T 3. F 4. T

C. Fill in the blanks.

1. Shift
2. Column
3. Design
4. Mail Merge
5. splitting

D. Match the following.

1. (b)
2. (c)
3. (d)
4. (a)

E. Answer the following questions.

1. A table is a grid of cells arranged in rows and columns. It is very useful in organising and representing the data in an effective manner.
2. See topic 'Inserting Rows/Columns' on book page no- 29.
3. The **Mail Merge** feature in Word provides you with a tool to create and send multiple letters and invitations to many people at the same time. Each letter or invite is addressed to different people but has the same text.
4. See topic 'Applying Shading' on book page no- 28.
5. A Data Source is a file that contains the information to be merged with the Main Document, such as names and addresses. The data source contains the details of all the people to whom the letter will be sent.

Fun Activity

1. Do yourself.

2.

T	A	B	L	E	R	S	V
B	O	R	D	E	R	H	D
D	R	O	W	F	N	A	E
C	O	L	U	M	N	D	S
I	N	S	E	R	T	I	I
M	E	R	G	E	R	N	G
S	P	L	I	T	T	G	N
L	A	Y	O	U	T	G	D

HOTS

On the layout tab, in the Cell Size group, click in the Table Row Height box or Table Column Width, and then specify the height or width you want.

or

Bring your mouse pointer over the table which you want to resize. A small resize icon will appear at the bottom-right corner of the table. Bring the mouse pointer over the Resize icon press the left mouse button and drag the table to make it shorter or larger.

CHAPTER 4

Formatting a Presentation

A. Multiple Choice Questions.

1. (b) 2. (c) 3. (a) 4. (b)

B. State true 'T' or false 'F'.

1. T 2. T 3. F 4. T 5. F

C. Fill in the blanks.

1. F5 2. Animation 3. variants
4. Normal view 5. whooshing star

D. Answer the following questions.

1. Themes are an inbuilt feature that offers a quick way of changing the layout and background design of the presentation that has been created. Each theme has its own set of colors, fonts and effects.

   The steps to apply slide themes are as follows.

   Step 1 : Click on the **Design** tab. A number of themes appears.

   Step 2 : In **Themes** group, click on the drop-down arrow to see more themes.

   Step 3 : Select the desired theme. The theme will be applied to all the slides of a presentation.

2. See topic 'Views of PowerPoint' on book page no- 39.

3. Slide Master sets the default layout and formatting for all other slides. It actually controls an entire presentation. Any changes made in the Slide Master Page automatically reflects on every slide in the presentation. Slide Master are commonly used for :

   A. Modifying and customising the background of all slides at the same time.
   B. Rearranging the placeholders of all slides at the same time.
   C. Editing and text formatting such as font, font color, etc., of all slides at the same time.

4. See topic 'Changing The Background' on book page no- 42.

5. To remove an animation, click on the number to remove. The number box gets highlighted. Press the **Delete** key.

You can also remove an animation effect from the **Animation Pane**. Just click on an effect and press the **Delete** key. The animation effect is removed.

Fun Activity

See topic 'Recalling MS PowerPoint 2016 Interface' on book page no- 37.

HOTS

See topic 'Slide Transition' on book page no- 44.

CHAPTER 5

Introduction to Excel 2016

A. Multiple Choice Questions.

1. (b) 2. (b) 3. (c) 4. (a)

B. State true 'T' or false 'F'.

1. T 2. F 3. T 4. T

C. Fill in the blanks.

1. Title bar 2. Book 1 3. Three 4. Workbook

D. Answer the following questions.

1. To start Excel, follow the steps given below.

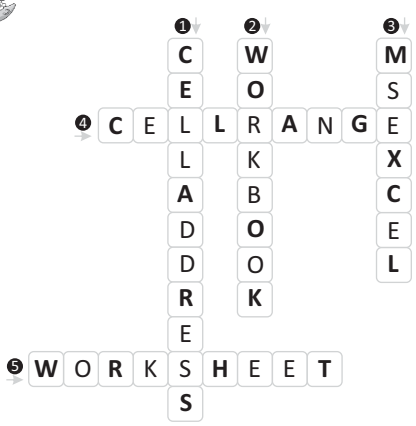
   Step 1 : Click on the **Start** button.

   Step 2 : Click on the **Excel 2016** option.

   Step 3 : Click on **Blank workbook** option. A blank Excel worksheet opens.

2. A cell marked with a dark border is called an **active cell**. A cell is activated by clicking on it to insert the data. In short, an active cell indicates the insertion point to enter the data into cell. When we enter data, it is reflected in the active cell only.
3. A worksheet is a single sheet within a workbook. A worksheet is made up of rows and columns that intersect to create cells. While a workbook is an Excel file that contains one or more worksheets.
4. See topic 'Renaming a Worksheet' on book page no- 55.
5. See topic 'Closing A Workbook' on book page no- 58.

Fun Activity



HOTS

Cut : Ctrl + X, **Paste :** Ctrl + V

CHAPTER **6**

Conditional Blocks in Scratch

A. Multiple Choice Questions.

1. (c) 2. (a) 3. (c) 4. (b) 5. (a)

B. State true 'T' or false 'F'.

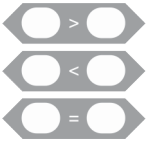
1. T 2. F 3. T 4. F 5. T

C. Fill in the blanks.

1. Hat 2. Operators 3. sensing
4. Variables 5. ask

D. Answer the following questions.

1. Scratch conditional statements determine whether a boolean condition supplied by the programmer is true or false. They enable you to compare a variable to another variable or test a variable against a value, allowing you to control how the program behaves depending on whether the condition is satisfied on not.

2. Hat, Stack, Boolean, Reporter, C and Cap.
3. Sensing blocks in Scratch sense the input from the keyboard or the mouse at the time of execution of a script. They are color-coded light-blue, and are used to detect things. They can be used to determine the location of the mouse pointer, its distance from other sprites, and whether a sprite is touching another sprite.
4. In scratch, variables can be used to store data such as numbers, strings, or Boolean values, and can be accessed from any sprite in your project. In Scratch, there are three types of variables :
   (i) **Global Variables :** Global variables are accessible throughout the entire program. Once created, they can be used in any block or script.
   (ii) **Local Variables :** Local variables are only accessible within a specific block or script. They are created and used within the block or script, and they cannot be accessed outside of it.
   (iii) **Sprite Variable :** Sprite variables are specific to a particular sprite in the scratch project. They can store information about the sprite's position, size, direction, and other properties.
5. 

Greater than

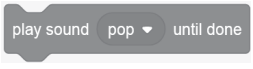
less than

equal to

Fun Activity

H	A	T	A	C	X	Z	D	E	B
S	C	R	I	P	T	R	Q	W	L
T	T	S	P	R	I	T	E	J	O
A	V	A	R	I	A	B	L	E	C
C	A	P	K	K	D	W	Q	G	K
K	B	O	O	L	E	A	N	N	S
J	S	T	R	I	N	G	Y	U	L
R	E	P	O	R	T	E	R	F	E

HOTS



CHAPTER 7

Learning About Artificial Intelligence

A. Multiple Choice Questions.

1. (c) 2. (c) 3. (c) 4. (a) 5. (c)

B. State true 'T' or false 'F'.

1. T 2. F 3. T 4. T 5. F

C. Fill in the blanks.

1. Artificial Intelligence
2. Chatbots
3. Siri, Google Assistant and Cortana
4. Teslabot
5. Entertainment

D. Answer the following questions.

1. See topic 'Importance of Artificial Intelligence' on book page no- 71.
2. **Super AI** is a level of Intelligence of **Systems** at which machines could surpass human intelligence, and can perform any task better than human with cognitive properties. It is an outcome of general AI. Some key characteristics of strong AI include capability include the ability to think, to reason, solve the puzzle, make judgments, plan, learn, and communicate by its own.
3.

General AI	Narrow AI
General AI is a type of intelligence which could perform any intellectual task with efficiency like a human. The idea behind the general AI to make such a system which could be smarter and think like a human by its own.	Narrow AI is a type of AI which is able to perform a dedicated task with intelligence. The most common and currently available AI is Narrow AI in the world of Artificial Intelligence. Narrow AI cannot perform beyond its field or limitations, as it is only trained for one specific task. Hence it is also termed as weak AI.

4. Tic-Tac-Toe and F.E.A.R
5. **Advantages of Artificial Intelligence**

   Following are some main advantages of Artificial Intelligence:

   - **High Accuracy with less errors:** AI machines or systems are prone to less errors and high accuracy as it takes decisions as per pre-experience or information.

- **High-Speed:** AI systems can be of very high-speed and fast-decision making, because of that AI systems can beat a chess champion in the Chess game.

Disadvantages of Artificial Intelligence

- **Can't think out of the box:** Even we are making smarter machines with AI, but still they cannot work out of the box, as the robot will only do that work for which they are trained, or programmed.
- **No feelings and emotions:** AI machines can be an outstanding performer, but still it does not have the feeling so it cannot make any kind of emotional attachment with human, and may sometime be harmful for users if the proper care is not taken.

Fun Activity

T	E	S	L	A	B	O	T	Z	A	L	E	X	A	M
R	F	T	R	D	A	E	N	C	R	H	E	O	N	E
A	C	H	H	F	C	D	M	V	T	N	R	U	V	R
C	H	A	T	B	O	T	J	S	I	R	I	Y	C	D
F	B	E	X	G	R	X	Y	M	F	R	F	T	X	Z
G	F	G	I	N	T	E	L	L	I	G	E	N	C	E
R	O	B	O	T	A	R	R	A	C	F	T	R	F	R
G	L	O	K	J	N	G	E	F	I	E	H	E	E	I
X	K	T	I	L	A	C	A	R	A	S	Y	W	V	C
H	S	O	P	H	I	A	D	G	L	G	U	Q	X	A

HOTS

Unemployment, make humans lazy, lock creative ability, absence of emotional range.

CHAPTER 8

Electronic Mail : E-mail

A. Multiple Choice Questions.

1. (c) 2. (a) 3. (c) 4. (a) 5. (a)

B. State true 'T' or false 'F'.

1. T 2. T 3. T 4. F 5. F

C. Fill in the blanks.

1. Internet 2. Hotspots 3. @ 4. To 5. Bcc

D. Answer the following questions.

1. Moblie device use cellular signals coming from the nearest cell towers to access the internet. on the other hand, Wireless networks use radio frequency waves to provide internet access.
2. See topic 'E-mail' on book page no- 82 and 'Advantages of E-mail' on book page no- 83.
3. See topic 'E-MAIL ADDRESS' on book page no- 83.
4. To exit your Gmail account, follow the steps given below.

   Step 1 : Click on the **Account** icon. A small window appears.

   Step 2 : Click on the **Sign out** button. You will be signed out of your Gmail account.

Fun Activity

HOTS

Downloading means receiving data or a file from the internet on your computer. Uploading means sending data or a file form your computer to somewhere on the internet.