

Drag and

Drop

Class - 4

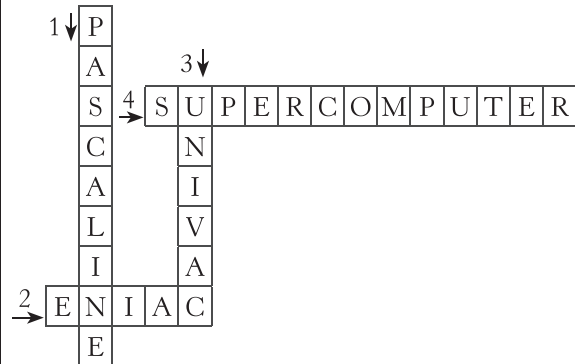
Activity Time

The students will do it themselves.

| Name | Invention |
|-----------------|-------------------|
| Blaise Pascal | Pascaline |
| Charles Babbage | Analytical Engine |
| John Napier | Napier's Bones |
| J. P. Eckert | ENIAC |
| John Mauchly | UNIVAC-I |

Brain Teaser

The complete puzzle is given below.



Rapid Fire

1. Napier's Bones device used the Hindu-Arabic notation of numbers.
2. The main working component of second-generation computers was transistor.
3. Pascaline was the first mechanical calculator.

Let's Review

- A. Tick (✓) the correct option.
 1. (c)
 2. (b)
 3. (b)
 4. (b)
 5. (c)
- B. Match the following.
 1. (c)
 2. (d)
 3. (a)
 4. (e)
 5. (b)
- C. Write True or False for the following statements.
 1. False
 2. True
 3. True
 4. True
 5. False
- D. Answer the following questions.
 1. Napier's Bones was a calculating device invented by a Scottish mathematician named

7. Three types of tools available in Paint are: Text tool, Curve tool and Color Picker.
8. To select an icon, point the mouse pointer over the icon to be selected and click on it. The change in colour of the area around the icon shows that icon is selected.
9. The Repeat block found in the Control category is used to repeat a set of statements (blocks) a number of times as we want.
10. Deep Blue, a reactive machine, was developed to play the chess game against a human. Its aim was to defeat the human.

C. Fill in the blanks.

1. **Application programs** are mini programs that display information and provide access to various useful tools.
2. **Quick Access** bar launches an application quickly.
3. The blinking vertical line in the upper-left corner of the text area is known as the **turtle**.
4. LOGO stands for **Logic Oriented Graphic Oriented**.
5. The **Delete** command is used to delete the selected part of an image.

D. Write True or False for the following statements.

1. True
2. True
3. False
4. True
5. True

E. Match the following.

1. (d)
2. (a)
3. (f)
4. (c)
5. (h)
6. (g)
7. (e)
8. (b)

Cyber Olympiad

Tick (✓) the correct option for each question.

1. (b)
2. (d)
3. (c)
4. (d)
5. (d)
6. (a)
7. (c)
8. (b)
9. (a)
10. (c)
11. (a)
12. (a)
13. (c)
14. (d)
15. (d)
16. (a)
17. (b)
18. (a)
19. (a)
20. (c)
21. (d)
22. (c)
23. (d)
24. (c)
25. (c)
26. (b)
27. (d)
28. (b)
29. (c)
30. (b)

John Napier in 1614. It was made from bone, horn or ivory. It used the Hindu-Arabic notation of numbers for quick performing multiplications.

- The ENIAC (Electrical Numerical Integrator And Computer) was the first general purpose computer. This machine used decimal digits instead of binary digits.
- The full form of UNIVAC-I is Universal Automatic Computer. It was the first commercial electronic computer, which could work with both numeric and text data.
- Artificial intelligence is a branch of computer science that develops intelligence in computers.
- The difference between a mainframe computer and a microcomputer:





| Mainframe computer | Microcomputer |
|---|---|
| A mainframe computer is a very large and fast computer. Its terminals are connected with one CPU. | A microcomputer is the smallest digital computer, which uses micro-processors as its CPU. |



Activity Time

The students will do it themselves.

Chapter 2 : More about Computers

Activity Time

| Picture | Name of Device | Use |
|---|----------------|---|
|  | CPU | It controls all the activities of the computer. |
|  | Joystick | It is used to input instructions by moving its stick in the required direction. |
|  | Microphone | It is used to record sounds in a computer. |
|  | Web camera | It is used to capture picture and live videos. |

| | | |
|---|---------|---|
|  | Mouse | It is used to point and select every thing on the computer screen. |
|  | Scanner | It reads text and images on paper and convert them into a usable form for the computer. |

Rapid Fire

- Function keys of the keyboard are marked as F1 - F12.
- Output devices are used to display results.
- The Caps Lock is used to type letters in uppercase once activated. The Shift key, on pressing, allows us to type capital letters and the symbols at the top of the keys.
- Three types of monitors are: CRT (Cathode Ray Tube) monitors, LED (Light Emitting Diode) monitors and LCD (Liquid Crystal Display) monitors.

Let's Review

- Tick (✓) the correct option.
 - (c)
 - (b)
 - (c)
 - (c)
 - (c)
 - (b)
- Match the following.
 - (e)
 - (c)
 - (d)
 - (b)
 - (a)
- Write the full form of each of the following.
 - MU: Memory Unit
 - ALU: Arithmetic Logic Unit
 - CPU: Central Processing Unit
 - ROM: Read Only Memory
 - RAM: Random Access Memory
 - CU: Control Unit
- Answer the following questions.
 - A computer is an electronic device which works on the principle of:
Input → Processing → Output
 - Input → Processing → Output is the principle on which a computer works. In it:
Input means that it takes instructions and commands from the user.

Processing examines instructions and commands and calculated them.

Output gives the result accordingly.

- An input device is a device that is used to enter data and instruction into the computer. Two input devices are the keyboard and the mouse.
- An output device is used to display the result obtained after processing. The monitor and the printer are two output devices.
- A CPU has three main parts. They are: Arithmetic Logic Unit, Control Unit and Memory Unit.
- The secondary memory comprises storage devices such as hard disk, CD (Compact Disk), DVD (Digital Versatile Disk), blue-ray disk, flash disk, etc. Its main function is to store data/information and programs for long period of time.
- RAM, stands for Random Access Memory, is the main memory of a computer that stores data temporarily.

Difference : RAM is a temporary memory, whereas POM is the permanent memory.

Brain Teaser

The names of five computer hardware are circled in the below grid.

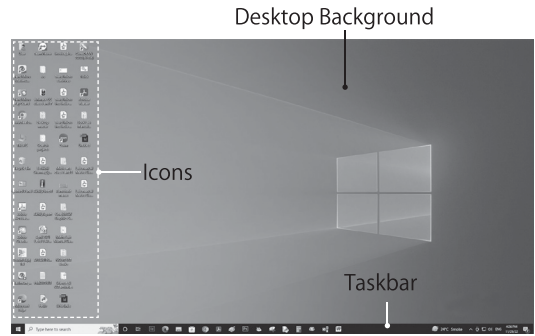
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| H | E | O | C | D | I | M | N |
| A | S | K | J | P | N | O | W |
| R | C | O | S | G | I | N | J |
| D | V | D | F | D | N | I | O |
| I | N | R | D | S | A | T | E |
| G | N | A | I | M | H | O | H |
| K | E | Y | B | O | A | R | D |
| O | R | B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

Chapter 3 : More on Windows 10

Activity Time

- The students will do it themselves.

- The labelled picture is given alongside.



Rapid Fire

- The taskbar has a Start button, Quick Launch bar, System tray and Show Desktop button.
- Files and folders are computer's utilities used to store data on the computers.

Rapid Fire

- Windows 10 desktop has three main components.
- An icon represents a file or folder.
- A folder within another folder is called a sub-folder.

Brain Teaser

- This option helps to change the name of an existing file or folder.

| | | | | | |
|---|---|---|---|---|---|
| R | E | N | A | M | E |
|---|---|---|---|---|---|

- It has Start button, System tray and Show Desktop button.

| | | | | | | |
|---|---|---|---|---|---|---|
| T | A | S | K | B | A | R |
|---|---|---|---|---|---|---|

- This option moves a file or folder from one place to another.

| | | |
|---|---|---|
| C | U | T |
|---|---|---|

- This option deletes a file or folder and sends it to Recycle Bin.

| | | | | | |
|---|---|---|---|---|---|
| D | E | L | E | T | E |
|---|---|---|---|---|---|

- These are present on desktop which represent program, files or folders.

| | | | | |
|---|---|---|---|---|
| I | C | O | N | S |
|---|---|---|---|---|

- These are mini-programs that provide access to various useful tools.

| | | | | | | |
|---|---|---|---|---|---|---|
| G | E | D | G | E | T | S |
|---|---|---|---|---|---|---|

Let's Review

- A. Tick (✓) the correct option.
1. (c) 2. (b) 3. (a) 4. (c)
- B. Write True or False for following statements.
1. True 2. True 3. False
4. False 5. True
- C. Answer the following questions.
- Windows 10 is an operating system that controls the operation of a computer and the programs running on it.
 - A folder is a place where many files are stored. A folder can hold other folders as well.
 - Cut and Paste command are used to move files, folders and selected text from one place to another.
 - The steps to rename a file or folder are:
 - Select the file or folder to be renamed.
 - Right click the mouse button and choose the Rename option. A highlighted place appears with old name of file or folder.
 - Type the new name from the file or folder and press the Enter key.

Model Test Paper — I

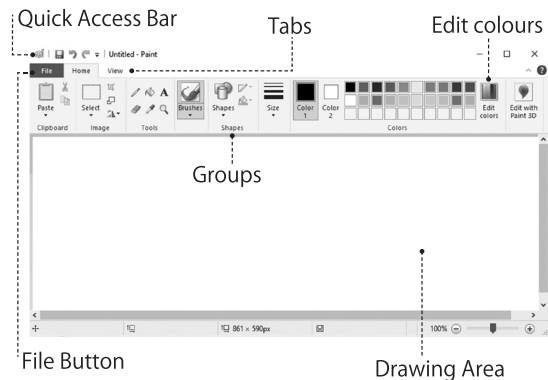
- A. Tick (✓) the correct option.
1. (b) 2. (b) 3. (b) 4. (c)
5. (c) 6. (b) 7. (c) 8. (b)
- B. Answer the following questions.
- Yes, we can rename a file or folder. For it, we use the following steps.
 - Select the file or folder to be renamed.
 - Right click the mouse button and choose the Rename option. A highlighted place appears with old name of file or folder.
 - Type the new name from the file or folder and press the Enter key.
 - The full form of UNIVAC-I is Universal Automatic Computer. It was the first commercial electronic computer, which could work with both numeric and text data.
 - The two types of computers are microcomputers and supercomputers.
 - Output devices display the output or result of input data after processing.

- A computer has the ability to store, retrieve, and process data. It can be programmed with instructions from its memory.
 - A hardware is a physical device which can be touched, whereas a software cannot be touched.
 - Windows Media Player is a popular media player program from Windows which is used for playing and organizing audio and video files, i.e., to listen to songs and watch movies.
 - An application software is a computer program designed to carry out specific tasks to be used by end-users.
- C. Write the full form of the following.
- ALU: Arithmetic Logic Unit
 - CPU: Central Processing Unit
 - ROM: Read Only Memory
 - RAM: Random Access Memory
 - GUI: Graphical User Interface
- D. Match the following with their main components.
- | | | |
|--------|--------|--------|
| 1. (d) | 2. (f) | 3. (a) |
| 4. (e) | 5. (b) | 6. (c) |

Chapter 4 : More on Paint

Activity Time

The labelled picture is given below.

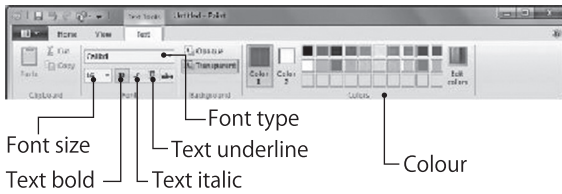


Rapid Fire

- The term 'crop' means to cut short.
- The Resize option is found in Image group.
- The Skew command changes one end of image while keeping the other end fixed.

Brain Teaser

The labelled picture is given below.



Let's Review

- A. Tick (✓) the correct option.
- (c)
 - (c)
 - (b)
 - (a)
- B. Answer the following questions.
- Paint is a simple program that allows users to create basic painting utility on a computer.
 - The Text tool is used to type text.
 - Image group allows users to rotate, flip, stretch and skew the pictures.
 - The options present in the Image group are: two types of selections, crop, resize, skew, flip and rotate

Chapter 5 : More on MS Word 2016

Activity Time

Functions of the given icons are given in the table alongside.

| Button Icon | Function |
|-------------|---|
| | It is used to paste the copied text or image. |
| | It is used to cut the selected text or image. |
| | It is used to copy text or image. |
| B | It is used to make text bold. |
| <i>I</i> | It is used to make text italic. |
| <u>U</u> | It is used to underline text. |

Rapid Fire

- Ribbon contains many parts File, Home, Insert, Page layout, References, Mailing, Review and View are its main parts.
- On the upper-left corner of the Word 2016 window is File tab.
- Clipboard group in the Home tab is used for copying or moving text.

- Font size means the size of letters or characters of text.

Let's Review

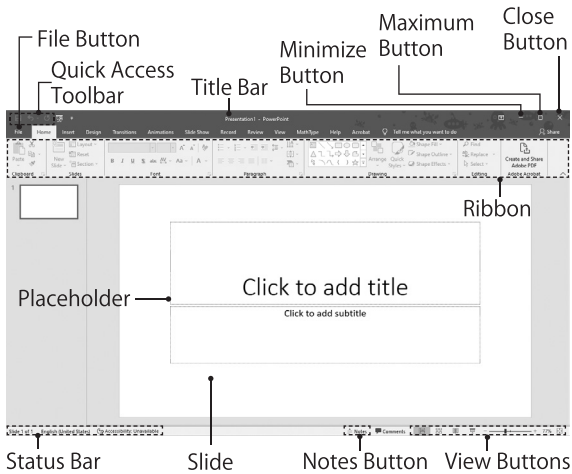
- A. Tick (✓) the correct option.
- (a)
 - (c)
 - (d)
 - (c)
 - (d)
 - ()
- B. Write keyboard shortcut for the following.
- Undo: Ctrl + Z
 - Bold: Ctrl + B
 - Copy: Ctrl + C
 - Paste: Ctrl + V
 - Underline: Ctrl + U
 - Select all: Ctrl + A
 - Right alignment: Ctrl + R
- C. Write True or False for the following statements.
- False
 - False
 - True
 - False
 - True
- D. Answer the following questions.
- Word processing means creating and editing documents on a computer.
 - Three features of MS Word are:
 - Adding pictures in the document to make it more attractive
 - Checking spelling mistakes and grammar
 - Changing the text look applying different colours, styles and effects
 - Editing means making changes in a document using different tools.
 - Formatting the text means changing font size, font colour, bold, italic, etc., of letter or words of the sentence or the document.
 - The way placing the text in a page is called alignment. The four types of alignments are left alignment, right alignment, centre alignment and justify.

Brain Teaser

- | | | | | | | |
|---|---|---|---|---|---|---|
| Q | U | I | C | K | | |
| A | C | C | E | S | S | |
| T | O | O | L | B | A | R |
- | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| C | L | I | P | B | O | A | R | D |
|---|---|---|---|---|---|---|---|---|
- | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| B | U | L | L | E | T | S | | |
| A | N | D | | | | | | |
| N | U | M | B | E | R | I | N | G |
- | | | | | | |
|---|---|---|---|---|---|
| S | T | A | T | U | S |
| B | A | R | | | |

Activity Time

The labelled picture is given below.



Rapid Fire

1. Yes, PowerPoint is a part of the Microsoft Office suite.
2. The Notes pane is at the bottom of the Slide pane.
3. A placeholder holds the objects in the slide.
4. The View button allows three slide views.
5. The Title Bar displays the title of the program.

Let's Review

- A. Tick (✓) the correct option.
1. (c) 2. (c) 3. (a)
 4. (c) 5. (b)
- B. Write True or False for the following statements.
1. True 2. False 3. True
 4. True 5. False
- B. Answer the following questions.
1. In PowerPoint, a presentation is a group of slides arranged in a systematic order that display information along with graphics, movies, sound, etc.
 2. MS PowerPoint is a presentation software which is used to make presentations for personal and professional purposes.
 3. A Slide Show means showing the created presentation (slides) to others. It is often displayed on a large screen using a video projector.

4. The steps for starting the MS PowerPoint:
 - Click the Start button. A list of different programs is opened.
 - Move the scroll wheel up and down to search the PowerPoint and click it. A window is opened on the screen.
 - Click the New button.
 - Click the Blank Presentation box.

PowerPoint Window appears on the screen,.

5. The steps to run a Slide Show:
 - Click the Slide Show tab.
 - Click the From Beginning option from the Start Slide Show group.

The slides will start displaying on the full screen. Start the new slide using the mouse.

Rapid Fire

1. The Internet connects millions of computers across the world.
2. The full form of ISP is Internet Service Provider.
3. World Wide Web (WWW) contains millions of websites.
4. Email allows us to send message to anyone around the world

Brain Teaser

The complete word puzzle is given below.

| | | | | | | |
|---|---|---|---|---|---|---|
| A | B | C | I | A | B | W |
| A | B | N | N | A | W | E |
| A | B | E | T | A | E | B |
| A | B | T | E | A | B | P |
| A | B | W | R | A | S | A |
| W | B | O | N | A | I | G |
| E | B | R | E | A | T | E |
| B | B | K | T | A | E | A |

Let's Review

- A. Tick (✓) the correct option.
1. (d) 2. (a) 3. (b)
 4. (b) 5. (b)
- B. Write True or False for the following statements.
1. True 2. True 3. False
 4. False 5. True

C. Fill in the blanks by using the following words.

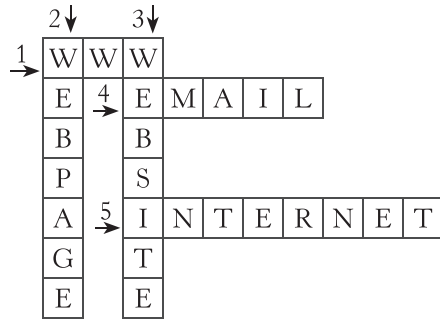
1. A web **page** is a part of a website.
2. A computer **network** is a group of inter-connected computers.
3. The world wide web is also called **WWW**.
4. Internet is the **biggest** network of computer.
5. A website is a **collection** of several web pages.

D. Answer the following questions.

1. The Internet is a vast network of computers all over the world.
2. The Internet is used for many purposes. Some of them are:
 - The Internet is used by millions of people throughout the world daily to search on any topics.
 - It can be used to purchase various items through on-line shopping.
 - It can be used to send and receive messages through E-mail service.
 - It can be used to find latest news of any newspaper and TV channel on it.
 - It allows the users to download songs, movies and other information.
 - It can be used to play or download latest online games on Internet.
 - It can be used to talk/chat and see the people using audio/video conferencing.
3. World Wide Web is the largest collection of information on the Internet. It contains millions of websites that provide a vast amount of information.
4. A web browser is a software which helps us to open and view the contents stored on the electronic pages of the World Wide Web. Microsoft Edge, Google Chrome and Mozilla Firefox are some web browsers.
5. E-mail is a way of exchanging messages between people through electronic devices like computers. It is the fastest means of sending and receiving written messages, images, videos, etc.

Activity Time

The complete crossword puzzle is given alongside.



Chapter 9 : More About Scratch

Rapid Fire

1. The Title bar displays the title of the window.
2. The Menu bar contains Language icon, Sprite toolbar, File menu, Edit menu, About menu and Tips menu.
3. The Language icon is used to change the language interface.
4. The Presentation mode button is used for viewing the presentation in full screen mode.

Rapid Fire

1. In Scratch, the cursor tools are located in the middle of the Menu bar.
2. There is one block palette in Scratch, which has ten categories of blocks.

Let's Review

- A. Tick (✓) the correct option.
1. (a) 2. (d) 3. (c)
 4. (b)
- B. Fill in the blanks by using the following words.
1. **Grow button** is used to enlarge the size of a Sprite.
 2. **Sprite List** displays the thumbnails for all Sprites in a project.
 3. A small graphic character that performs actions in a Scratch project is called **Sprite**.
 4. In Scratch, the Sprite moves on the **Stage** when we run the program.
 5. The x-coordinate value determines the horizontal location of the Sprite
- C. Write 'True' or 'False' for the following statements.
1. False 2. False 3. True
 4. False 5. True

D. Answer the following questions.

- Scratch, a block-based visual programming language, can be used to create interactive stories, games and animations.
- The default position of the Cat sprite is 90° .
- Green Flag is used to start an execution of a Scratch program. When it is pressed, the program starts running.
- Motion blocks are used for the movement, rotation and reading current data related to a Sprite's location.
- The Repeat block is a control block. It is used to repeat the program blocks held inside it for a given number of times.
- The steps to change the effect (colour) of the Sprite:
 - Click the 'Motion' category of blocks.
 - Drag the 'move' block to the Sprite Area.
 - Click the 'Looks' category of blocks.
 - Drag the 'change ... effect by' block to the Sprite Area and snap it below the move block. You can change the number 25 to 20 or 15.
 - Click any of these coding blocks.

It will be observed that the Sprite moves and changes its colour every step.





- The steps to make the Sprite say something:
 - Click the 'Motion' category of blocks.
 - Drag the 'move' block to the Sprite Area.
 - Click the 'Looks' category of blocks.
 - Drag the 'say Hello' block to the Sprite Area and snap it above the 'move' block.
 - Drag the 'say Hello for 2 secs' block from the 'Looks' category to the Sprite Area and snap it below the 'move' block.
 - Change the text from Hello to as you want (say I am a smart Sprite). Also, change the number 2 to 10. It will increase the time duration.
 - Click any of these coding blocks.

A speech bubble with "I am a smart Sprite" will appear.

- Looks Blocks are used to control the appearance of the Sprite. Some of these blocks let the users display text.

Activity Time

Functions of the given blocks are given in the table given below.

| Blocks | Functions |
|---|--|
|  | It is used to change the direction to the opposite when the Sprite touches the edge of the Stage. |
|  | It is a point direction block which sets the Sprite in a particular direction. We can choose any of the four directions. |
|  | It is used to display the text in a speech bubble, either for a given period of time or indefinitely. |
|  | It is used to display a thought bubble. It does not stop the script execution. |

Chapter 10 : Artificial Intelligence

Let's Review

- Tick (✓) the correct option.
 - (c)
 - (c)
 - (c)
 - (b)
 - (d)
 - (c)
- Fill in the blanks with the words given below.
 - Machines based on self-awareness will be super **intelligent**
 - Reactive machines do not share **memories**.
 - Artificial intelligence machines based on the theory of mind understand human **emotions**.
 - Self-driving machines are an example of **limited theory** artificial intelligence.
- Write True or False for the following statements.
 - True
 - False
 - True
 - False
 - False
- Answer the following questions.
 - Artificial intelligence a branch of computer science. A machine having intelligence is a robot.
 - The roll of artificial intelligence in:
 - Gaming** : In last few years, artificial intelligence has played a significant role in strategic games and sports such as chess, poke, and tic-tac-toe. In these games,

machines think a large number of possible options based on their intelligence.

- (b) **Healthcare** : In the last few years, artificial intelligence has become a booming technology in the field of healthcare. It can enhance preventive care and quality of life. It can help doctors with diagnoses and can inform when patients are worsening so that medical help can reach to the patient before hospitalisation.
- (c) **Education** : Today, artificial intelligence has become a booming technology in the field of education. It is capable of changing various aspects of the education system. It can automate grading so that the tutor can have more time to teach. With the use of artificial intelligence, students now have a personalized approach to learning programs based on their own unique experiences and preferences. Artificial ChatBot can communicate with students as a teaching assistant.

3. Speech recognition is a very useful application of artificial intelligence. This new technology has the power to convert voice messages to text. It also has the ability to recognise an individual based on their voice command. Today, Siri, Cortana, and Google use voice recognition to follow the user's command.
4. The students will answer this questions according to their thinking and need for a robot.
5. The students will answer this questions according to their thinking and imagination.
6. Undoubtedly, artificial intelligence has played a very significant roll in the progress of humans. However, artificial intelligence is impacting the future of humans in many fields. Some experts believe that the rise of artificial intelligence will make most people better off over the next decade. They predict that networked artificial intelligence will amplify human effectiveness but also threaten human autonomy, agency and capabilities. They spoke of the wide-ranging possibilities that computers might match or even exceed human intelligence and capabilities on tasks such as complex decision-making, reasoning

and learning, sophisticated analytic and pattern recognition, visual acuity, speech recognition and language translation. According to them, smart systems in communities, vehicles, buildings, and in business processes will save time, money and lives. It will offer opportunities for individuals to enjoy a more-customised future.

The artificial intelligence is programmed to do something devastating. For example, autonomous weapons have artificial intelligence, which could easily cause mass casualties.

Today, many people use the Amazon Alexa app to set up their Alexa-enabled devices, listen to music, create shopping lists, get news updates, and much more. The more we use Alexa, the more she adapts to our voice, vocabulary, and personal preferences. It will continue to act as a technological innovator for the foreseeable future.

Model Test Paper — II

A. Tick (✓) the correct option.

1. (d) 2. (a) 3. (b) 4. (c)
5. (a) 6. (c) 7. (a)

B. Answer the following questions.

1. Editing a document means focusing on improving the accuracy of language, flow, and overall readability including checking for grammar and spelling.
2. MS PowerPoint is a presentation software.
3. Alignment is a way of placing or presenting text in a page. The four types of alignment are left alignment, right alignment, centre alignment and justify.
4. An e-mail or electric mail is a service of sending messages all around the world through the Internet.
5. A website is like a book which provides information about many things, such as business organisations, games, educational institutions, and many more.
6. The PRINT command is used to write any number or text in the Recall List box of the commander window.

- The Recall List box displays all the output that the users have written or typed in the command input box.
- The purple color-coded Looks blocks are used to control a Sprite's appearance.

C. Write the shortcut keys for the following.

The shortcut key for:

- Undo is Ctrl + Z. 2. Bold is Ctrl + B.
- Copy is Ctrl + C. 4. Paste is Ctrl + V.
- Underline is Ctrl + U.
- Select all is Ctrl + A.
- Right alignment is Ctrl + R.

D. Write True or False for the following statements.

- False 2. True 3. True
- True 5. True

Cyber Olympiad

Tick (✓) the correct option for each question.

- (d) 2. (a) 3. (c)
- (b) 5. (c) 6. (d)
- (b) 8. (d) 9. (c)
- (a) 11.(b) 12.(c)
- (c) 14.(d) 15.(a)
- (a) 17.(b) 18.(a)
- (c) 20.(d)

Class 5

Chapter 1 : Generations of Computer

Brain Teaser

- | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| S | E | C | O | N | D | | | | |
| G | E | N | E | R | A | T | I | O | N |
- | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| F | O | U | R | T | H | | | | |
| G | E | N | E | R | A | T | I | O | N |
- | | | | | | | | |
|---|---|---|---|---|---|---|---|
| C | O | L | O | S | S | U | S |
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| S | U | P | E | R | | | |
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Rapid Fire

- Reynold B. Johnson is regarded as the father of the disk drive.

- The main working component of second-generation computers was transistor.
- A microcomputer is also known as the personal computer.
- Supercomputers are used for weather forecasting.

Let's Review

A. Tick (✓) the correct option.

- (b) 2. (a) 3. (c)
- (d) 5. (d)

B. Write True or False for the following statements.

- True 2. False 3. True
- False 5. True

C. Give two examples of each of the following.

Two examples of the:

- first generation computers are UNIVAC-I and ENIAC.
- second generation computers are UNIVAC 1108 and IBM 7077.
- third generation computers are Alter and IBM 370.
- fourth generation computers are desktop and laptop.

D. Answer the following questions.

- Computers that used transistors instead of vacuum tubes are called the second generation computers. The use of transistors made computers smaller, faster, more reliable and cheaper.
- The mainframe computers are the powerful multiuser computers capable of supporting many hundreds or thousands of users simultaneously. They have faster speed, bigger memory and mass storage capacity. They are used by big companies and enterprises.
- The main features of the fourth-generation computers are:
 - They are microprocessor-based computers.
 - They use microprocessor chips called VLSI (Very Large Scale Integration).
 - They are compact, powerful, fast and much cheaper.
- A supercomputer is the fastest and most powerful computer. It supports several