## ONLY FOR TEACHERS

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## TELH TOULH 1

## What is a Computer?

## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (a)
2. (a)
3. (a)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
4. F
5. F
6. T
C. Fill in the blanks.
7. fast
8. time
9. electricity
D. Answer in one word.
10. Human
11. Clock, Remote Control
12. mistakes
13. Computer
14. Computer
competency based questions
15. Yes, sharpener is a machine because it makes our work easier and helps us to save time.
16. No, all human-made things are not machine.

A.


## Uses of a Smart Machine

## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (a)
2. (b)
3. (b)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
4. $F$
5. $F$
6. T
C. Fillinthe blanks.
7. draw
8. store
9. solve
D. Answer in one word.
10. Movies
11. Computer
12. Hospitals

## Competency based question

Do Yourself.

A. 1. $\mathrm{B} \underline{\mathrm{ANK}}$
2. SCHOOL
3. HOSPITAL
4. OFFICE
B. See pictures in the book.
$\checkmark$ skate
C. Do yourself.
A. Tick $(\checkmark)$ the correct option.

1. (a)
2. (a)
3. (a)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
4. T
5. $F$
6. $F$
C. Fillin the blanks.
7. brain
8. monitor
9. mouse
10. keyboard
D. Answer in one word.
11. Four, CPU, Monitor, Keyboard and Mouse
12. Central Processing Unit
13. Speakers
14. Keyboard

Competency Based questions

1. Speakers
2. Hard Disk

A.


MONITOR


CPUBOX


K E Y B O A R D


MOUSE
B. 1. Mouse
3. Keyboard
2. Monitor
4. CPU
C. Do yourself.

## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (a)
2. (a)
3. (a)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
4. $F$
5. $F$
6. T
C. Fill in the blanks.
7. spacebar
8. longest
9. 10
D. Answer in one word.
10. Spacebarkey
11. Numberkeys
12. 26

Competency based questions

1. Number keys
2. Enter key


A.

B.


## P E T

LISTEN
K E Y

## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (a)
2. (a)
3. (b)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
4. T
5. $F$
6. T
C. Fillin the blanks.
7. tail
8. scroll
9. click
10. draw
D. Answer in one word.
11. Two
12. CPU
13. Index

## Competency based question

Double click the left mouse button.

A.

B.

| P | O | I | N | T | X | Y | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| O | A | B | L | D | S | Q | S |
| I | O | C | F | R | M | C | E |
| N | N | L | O | A | A | P | L |
| T | A | I | L | W | L | D | E |
| E | S | C | T | U | L | E | C |
| R | S | K | W | V | E | F | T |

## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (a)
2. (b)
3. (b)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
4. $F$
5. T
6. F
7. T
C. Fillin the blanks.
8. drawing
9. toolbar
10. drawing canvas
11. help area
12. Eraser
D. Match the following:

## Functions


4. To save a drawing

5. To close the Tux Paint

E. Answer the following questions.

1. To make any drawing on a computer, we have TUX Paint program that helps us to make colourful drawings.
2. Toolbox, colors palette.
3. Fill tool is used to fill colour inside the picture.
4. We use the Eraser tool to type erase our drawing.
5. Saving the drawing helps you to see it later.

## Competency based question

She can use Tux Paint. She can download it from https://tuxpaint.org.


Fun with AI

## Exercise

A. Tick $(\Omega)$ the correct option.

1. (b)
2. (b)
3. (b)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
4. T
5. T
6. F
C. Fill in the blanks.
7. Chatbot
8. Machines
9. Gaming
D. Answer the following questions.
10. Machine takes some decisions based on their intelligence. This intelligence is called artificial intelligence.
11. All we have an intelligence from which we take decisions. We called it human intelligence.
12. (a) A robot is used in logistic factories to carry the goods.
(b) A robot is used in car factories to manufacturing.

## Competency based questions

Use www.google.com on internet and search the topic by typing 'Robo-My friend'. Open relevant link to explore more information.

A.

B.


## Storage in a Computer

## Exercise

A. Tick $(\Omega)$ the correct option.

1. (c)
2. (a)
3. (a)
4. (a)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
5. F
6. $F$
7. T
8. T
C. Fill in the blanks.
9. data
10. pencilbox
11. storage
D. Answer in one word.
12. Almirah
13. School Bag
14. Hard disk
15. Any word, number, picture, sound or video which we feed in computer.
E. Match the following.

F. Unscramble the given words.


Competency based questions

1. Pen Drive
A.

B. Do yourself.
C. Do yourself.

## -••TELH TOULH 2

Computer : A Smart Machine

## Exercise

A. Tick $(\Omega)$ the correct option.

1. (c)
2. (c)
3. (b)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
4. T
5. $F$
6. F
7. T
C. Fill in the blanks.
8. decision
9. car
10. speed
11. desktop
D. Answer the following questions.
12. A man has brain. He can take decisions on its own but a computer cannot take decisions itself.
13. A computer cannot take decisions itself. It needs instructions from a human to work.
14. Desktop, Laptop, Tablet.
15. Computers are useful to teachers in following ways:
(a) Keeping records of students and teachers.
(b) Making worksheets, timetable and report cards.
(c) Keeping records of books in Library.

## Competency based Question

Laptop

A. 1. C
2. $M$
3. C
4. C
5. M
B.

C.

| S | C | H | O | O | L |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I | Y | O | N | L | B |
| O | K | S | H | O | P |
| P | S | P | A | C | E |
| Z | Q | I | L | C | D |
| D | W | T | W | G | V |
| G | B | A | N | K | B |
| K | P | L | T | M | O |

## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (b)
2. (b)
3. (b)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
4. F
5. T
6. T
7. T
C. Fill in the blanks.
8. output
9. processes
10. electronic
11. processing
D. Match the given columns properly.
12. Computer

(a) CPU
13. Input
14. Output
$\qquad$
(b) IPO Cycle
(c) Monitor
15. Processing
(d) Keyboard
E. Answer the following questions.
16. Input-Process-Output
17. A computer works in three steps:


This is called the IPO Cycle.
3. Keyboard
4. CPU
 Parts of a Computer

## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (b)
2. (monitor)
3. (a)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
4. F
5. T
6. F
7. T
C. Fillin the blanks.
8. mouse
9. Storage
10. Output
11. keyboard
D. Answer the following questions.
12. A computer has four main parts:
(a) Monitor
(b) Keyboard
(c) Mouse
(d) CPU box
13. Keyboard
14. Monitor is an output device that looks like a television. It shows us whatever we type on the computer.
15. Printer is used to print the output on the paper. These printed papers are known as hard copy.
competency based question
Monitor


## Lab Activity

Do yourself.

## The Typing Device

## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (c)
2. (a)
3. (a)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
4. T
5. T
6. T
7. $F$
C. Fill in the blanks.
8. Spacebar
9. toggle
10. four
11. delete
D. Answer the following questions.
12. Spacebar key is used to give space between two words.
13. Enter key is used to move the cursor to the next line.
14. Caps Lock key is used to type the capital letters. For example, when Caps Lock is enabled, the typed letters appears "LIKE THIS". When disabled, they appear "like this".
competency based questions
15. Alphabet Keys
16. Backspace key or Delete key
A. Do yourself.
B. (a) A
(b) \&
C.

A. Tick $(\Omega)$ the correct option.
17. (a)
18. (a)
19. (c)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
20. $\mathrm{F} / \mathrm{T}$
21. F
22. T
23. T
C. Fill in the blanks.
24. scroll-wheel
25. Double
26. arrow
27. Dragging
D. Answer the following questions.
28. Optical mouse, wireless mouse.
29. Pressing the left mouse button once is called single click.
30. It will show a list of menu options.
31. Moving an object to a new place is known as dragging.

## competency based auestion

Wireless Mouse


## Operating a Computer

## 3

## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (a)
2. (a)
3. (a)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
4. F
5. T
6. T
C. Fill in the blanks.
7. icons
8. Power
9. booting
10. shutdown
D. Answer the following questions.
11. Start button.
12. The desktop has many small pictures with names. These are called Icons.
13. Desktop.
14. Start button.

Doing so can lead to data loss or corruption and potentially cause an electrical short, leading to a power spike.
A.

B. (i)

(ii)


## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (b)
2. (c)
3. (b)
4. (c)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
5. $F$
6. T
7. T
8. T
C. Fillin the blanks.
9. Shapes
10. line
11. colours
12. help area
D. Identify the picture portion and match it with the tool.

E. Answer the following questions.
13. Toolbar, Selector pane, Drawing canvas, colors pallete, Help area.
14. The Text tool is used to type text on the drawing area.
15. Linetool.
16. Star, Triangle, Square, Polygon.

## Competency based question

Paint Tool

A.

B.


## Let us Draw in Paint

## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (c)
2. (a)
3. (b)
4. (b)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
5. F
6. F
7. T
8. $F$
C. Fill in the blanks.
9. Paint
10. Title bar
11. Fill with color
12. Home
D. Rearrange the jumbled words to make meaningful words.
(a) $P E D C D$
(b) $E R A B$
(c) $P A D N T$
(d) $B R \cup S$
E. Answer the following questions.
13. Fill with Color Tool.
14. Eraser Tool.
15. Pencil Tool.
16. Colors group.

## competency based question

Eraser Tool
ger
A.


## Artificial Intelligence Around Us

## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (c)
2. (a)
3. (b)
4. (b)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
5. T
6. F
7. $F$
8. T
C. Fillin the blanks.
9. smart
10. easier
11. face
12. amazon
D. Answer the following questions.
13. Artificial Intelligence (AI) is the ability of a computer or a machine to think, learn and act like human brain. The goal of Artificial Intelligence is to develop computers that are smart and can take decisions themselves to solve any problem.
14. Voice assistant, Robots.
15. Chatbot ELIZA.
16. Robots are automatically operated machine that work in place of humans.
E. Rearrange the letters to get meaningful words.
17. $R O B O T$
18. $S I R I$
19. $C O R A B A$
20. $G O O G E E$
21. $A B E X A$

## Competency based questions

1. In today's time, Al is considered a bane because it will eat up many jobs and become a major replacement for human beings. However, AI can also be considered a boon because it can perform multiple tasks effectively and produce faster results than humans.
Yes, Al becoming an indispensable part of our lives. For example, it's impossible for human being to survive in space for such a long time if there is no Al-powered robot.
2. Domains of Al are machine learning, deep learning, natural language processing, computer vision, and data science.
Search these topics on internet and choose your favourite Al domain.
A. 1. CCTV surveillance
3. GPS tracker
4. Biometric attendance
5. Digital content
6. Virtual class
B. Apple's Siri, Google Now, Amazon's Alexa, Microsoft's Cortana, IBM Watson, Infosys Nia, Google Assistant, ELSA Speak, Data Bot, Hound.
C.


Echo Dot
Self driving Car
Robot

## TELH TIUCH 3

## Exercise

A. Tick $(\Omega)$ the correct option.

1. (c)
2. (c)
3. (c)
4. (b)
5. (a)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
6. $F$
7. $T$
8. T
9. $F$
10. T
C. Fill in the blanks.
11. Hardware, Software
12. CPU
13. Output
14. Application
15. Operating System
D. Match the following.
16. Input device
17. Output device

(a) Printer
18. Storage device

(b) Scanner
. Processing unit
(c) Operating System
19. Processing unit
(d) CD
20. Software
(e) CPU

## E. Answer the following questions.

1. All the physical parts of a computer that you can see and touch are called hardware. For example: keyboard, mouse and CPU.
A Computer is an electronic machine. It cannot work by itself. A computer needs instruction (set of programs) to do anything. These step-wise instructions are called Software.
2. The devices that are used to enter data into the computer are called input devices. The most commonly used Input devices are keyboard, mouse, scanner, etc.
Output devices are used to display the result of the processed data and instructions. The most commonly used output devices are monitor, printer and speakers.
3. CPU controls and processes the information that we enter.
4. Hard Disk, Compact Disk (CD), Pen Drive
5. When you start your computer, a software also starts with it. This software is called the operating system.


## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (a)
2. (a)
3. (a)
4. (a)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
5. F
6. T
7. T
8. $F$
9. T
C. Fill in the blanks.
10. Microsoft
11. Desktop
12. Icons
13. Double
14. Wallpaper
D. Match the following.
15. Maximize button
16. Close button
17. Minimize button


## E. Answer the following questions.

1. Ctrl key.
2. Start button, Task View button, Quick Launch Bar, Notification Area and Show Desktop button.
3. Task View allows a user to quickly locate an open window, quickly hide all windows and show the desktop, and to manage windows across multiple monitors or virtual desktop.
4. (a) When we switch on the computer, the operating system gets loaded into the computer's memory. This process is called booting.
After booting, you get the welcome and login screens, then the main screen of the Windows appears, known as the Desktop. Desktop is the first screen that appears when you turn on the computer.
(b) Operating system is a software that manages and controls the different parts of a computer system and other software. Microsoft Windows is the most commonly used operating system. It acts as an interface between the user and the computer system.
5. On the left side of the Taskbar is the Start button. Clicking on the Start button opens the Start Menu. Start menu has two panes. The Left pane displays a list of programs called apps whereas the right pane has application icons in the form of tiles.

Competency based questions
Seema should use Task View button.

A.

B.

| 1. | T | A | S | K | B | A | R |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2. | D | E | S | K | T | 0 | P |  |  |
| 3. | W | A | L | L | P | A | P | E | R |
| 4. | 1 | C | 0 | N | S |  |  |  |  |
| 5. | C | L | 0 | S | E |  |  |  |  |

C. 1. YYYIYYCYYYOYNYYYS
2. YYSYYTYAYYRYT BYYUYTTYYYOYN
3. YYYYTYAYYYSYYKYYYBYAYYRY
4. YYYDYEYYYSYYYKYTYOXYYYPY

ICONS
START BUTTON
TASK BAR
DESKTOP
D. Do yourself.

## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (a
2. (b)
3. (a)
4. (b)
5. (c)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
6. T
7. F
8. T
9. F
10. T
C. Fillin the blanks.
11. Magnifier
12. Copy \& Paste
13. Text
14. Selection
15. Flip
D. Match the following.
16. A

17. 


E. Answer the following questions.

1. Rectangular Selection Tool and Free-form Selection Tool.
2. The Text Tool allows us to add text or messages to our drawings.
3. The foreground controls what color your brush or pencil will be, while the background color erases any added color and replaces it with the background color, which is white by default.
4. Cut option helps us to cut the selected part of a drawing and move (paste) it to a new location while copy option helps us to make a copy of the selected part.

Competency Based Questions

1. One-time
2. The steps to rotate the picture are as follows:

Step 1 : Click on the Select tool and select the picture.
Step 2 : Click on the Rotate option in the Image group on the Home tab.
A list of options will be displayed for changing the rotation or flipping.
Step 3 : Select the desired option.

A.

B.

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

C. Do yourself.

## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (b)
2. (b)
3. (b)
4. (a)
5. (b)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
6. $F$
7. T
8. T
9. T
10. F
C. Fill in the blanks.
11. .docx
12. Title bar
13. File
14. horizontal scrollbar
15. close
D. Match the following.
16. $\mathrm{Ctrl}+\mathrm{N}$
17. $\mathrm{Ctrl}+\mathrm{O}$
18. $\mathrm{Ctrl}+\mathrm{S}$
19. $\mathrm{Alt}+\mathrm{F} 4$
E. Answer the following questions.
20. Microsoft Word, OpenOffice.
21. Title bar, Quick Access Toolbar, Ribbon, Scroll Bars, Ruler
22. Word Wrap is a word processing feature that automatically transfers a word for which there is insufficient space from the end of one line of text to the beginning of the next.
23. To create a new document, follow the given steps.

Step 1 : Click on the File tab. The backstage view appears.
Step 2 : Click on the New option from the left pane.
Step 3 : Select the Blank document in the right pane.
A blank new document opens in a new Word window.

## competency based question

To save the document, follow the steps given below :
Step 1 : Click on the File tab. The backstage view appears.
Step 2 : Click on the Save As option.
Step 3 : Select the location where you want to save the file.
The Save As dialog box appears.
Step 4 : Enter the name of the file in the File name box.
Step 5 : Click on the Save button. The document will be saved with the name and location chosen by you.
A.

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

C. Do yourself.

## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (a)
2. (a)
3. (b)
4. (a)
5. (a)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
6. $F$
7. T
8. $F$
9. $F$
10. F
C. Fillin the blanks.
11. clipboard
12. $\mathrm{Ctrl}+\mathrm{B}$
13. Undo
14. Italic
15. Copy
D. Write the functions of given shortcuts:
16. Undo
17. Select All
18. Bold
19. Open
E. Answer the following questions.
20. To insert the text at any place in between an already typed text follow the steps given below.
Step 1 : Position the cursor to the right of the character where you want to insert the text.

Step 2 : Type out of the required text. As you type the text, the existing text shifts to the right.
2.

| Using Mouse |  |
| :---: | :--- |
| Selection | Method |
| A word | Double-click on the word. |
| A sentence | Hold down the Ctrl key and click anywhere on the <br> sentence. |
| A paragraph | Triple-click within the paragraph. |

3. Copying the text means the selected text will remain at its original position as well as the place where it is pasted.
Moving the text means to cut a piece of text from one location and paste it at another location.
4. The Undo option, is used for reversing the last action we performed in MS word. The Redo option, on the other hand, helps us to repeat the action we have undone using the Undo option.

## competency Based question

Place the cursor before the first letter of the sentence or word. Hold down Shift key shif and press the right arrow key $\rightarrow$ to select the desired portion of the text. Press Ctrl + A to select the entire document.

A. Human being have lived on Earth for many century. They have learnt to grow Crop for their food. They have used the Earth's natural resource, such as river, forests and mineral. They have learnt how to make and use tool to protect themselves and build shelter. They have built large city to live and work in. They have also built road to travel from one place to another and bridge to cross large rivers.
B. Do yourself.

## Exercise

## A. Tick $(\checkmark)$ the correct option.

1. (a)
2. (b)
3. (a)
4. (c)
5. (b)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
6. $F$
7. $F$
8. T
9. $F$
10. T
C. Fill in the blanks.
11. kids
12. scripts
13. block palette
14. white
15. Motion
D. Unscramble the jumbled words.
16. $S C R T P T$
17. $S P R I T E$
18. $B, C O K$
19. $B A B C D B D$
20. $S C A B C H$
E. Answer the following questions.
21. Scratch is an educational programming language designed for kids that makes it easy to program your own interactive stories, animations, games, music and art. In the process, they learn to solve problems, design projects and express themselves creatively on the computer.
22. Using scratch children can easily create attractive shapes, animated stories, computer games, music and art.
23. A backdrop is the background of the stage.
24. (a) Sprite is the actor who acts on the stage. Sprite is an object in Scratch that perform the function on Stage area. The default sprite in Scratch is an orange cat.
(b) The script is a block or a set of blocks which forms a code or a program.
25. The turn left ( ) degrees block will make a sprite move in anticlockwise direction.

Competency based questions

1. Use Motion Block.
2. You can make a character move backwards by giving your motion blocks negative numbers.

A. Do yourself.

## Ixercise

A. Tick $(\checkmark)$ the correct option.

1. (c)
2. (b)
3. (b)
4. (a)
5. (b)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
6. T
7. T
8. F
9. T
10. T
C. Fill in the blanks.
11. Internet
12. Modem
13. Google
14. WWW
D. Write the fullform of following:
15. WWW : World Wide Web
16. URL: Uniform Resource Locator
17. ISP: Internet Service Provider
E. Answer the following questions.
18. The Internet is a network of the interlinked computer networking worldwide. This network is accessible to the general public. Internet is such a huge network of several different interlinked networks relating to the business, academics and many smaller domestic networks. Hence, it is known as the network of all the other networks.
19. Microsoft Edge, Mozilla Firefox.
20. Webpage is the part of a website. Website is like a book and webpage is like a page of that book. A web page is a digital page containing information in the form of text, pictures, video and sound.
21. Internet is very useful for everyone. Some of its uses are discussed below:
(a) Internet is used to download songs and movies.
(b) Internet is used to see the latest news.
(c) Internet helps to search information.

## competency based questions

Microsoft Edge, Google Chrome.
B. (a) Library
(b) Books
(c) Book pages

(i) Websites

Web pages
Internet
C. Do yourself.

## AI-Enabled Devices

## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (a)
2. (b)
3. (c)
4. (b)
5. (c)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
6. T
7. T
8. T
9. T
10. F
C. Fill in the blanks.
11. Artificial Intelligence
12. Smart Speaker
13. Smart Assistant
14. Chatbot
15. Smart phones
D. Unscramble the jumbled words.
16. $C H A T B T$
17. $E D I B A$
18. $A B E A$
19. $S$ I $R$
20. $T E S A$

## E. Answer the following questions.

1. Smart watch, Smart doorbell, Smart TV, Self-Driving cars.
2. Chatbot.
3. In driverless car, Al software in the car is connected to all the sensors and collects input from street view and video cameras inside the car. The AI simulates human perceptual and decision-making processes using deep learning and controls actions in driver control systems, such as steering and brakes.
4. Google Map shows you directions and uses real-time traffic information to find the best route to your destination. With voice navigation, you can hear traffic alerts, where to turn, which lane to use, and if there's a better route.
5. Voice assistant carries out everyday tasks via voice command. It is brings AI and machine learning together to recognize our voice and do what we ask it.

Before setup, download or update the Alexa app in your mobile device app store.

1. Plug in you device.
2. Open the Alexa app.
3. Open More and select Add Device.
4. Select Amazon Echo.
5. Follow the instructions to set up your device.
6. Get started, just ask Alexa.

A.

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

B. Do yourself.

## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (c)
2. (a)
3. (c)
4. (a)
5. (c)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
6. $F$
7. F
8. T
9. $F$
10. T
C. Fill in the blanks.
11. Output device
12. scanner
13. CPU
14. Webcams
15. barcode scanner
D. Guess who am I?
16. Microphone
17. Printer
18. RAM
19. Headphone
20. Scanner

## E. Answer the following questions.

1. (a) (i) Keyboard
(ii) Mouse
(b) (i) Monitor
(ii) Printer
2. CPU is considered as the brain of the computer. CPU performs all types of data processing operations. It stores data, intermediate results, and instructions. The CPU is a chip inside the CPU box, mounted on the motherboard along with other components. It has three main parts: Arithmetic Logic Unit (ALU), Control Unit (CU), Memory Unit (MU).
3. IPO stands for input processing output. Computer takes input, process on it and gives output.
4. A monitor, also known as the Visual Display Unit (VDU) is the main output device of the computer because the output that we get on a monitor is called soft copy.
5. A printer helps to print the output on paper in the form of text and pictures. The printed copy is called the Hard Copy. Printer come in different types:
(a) Dot Matrix Printer
(b) Inkjet Printer
(c) Laser Printer
6. Vikrant should use Inkjet printer because this printer is better for printing color documents. Sachin should use laser printer because this printer is much faster than inkjet printer and better suited for printing text-based documents.
7. Scanner

A.

B. Calculation is being done

Dirty water
C. Do yourself.
A. Tick $(\Omega)$ the correct option.

1. (a)
2. (b)
3. (c)
4. (c)
5. (a)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
6. T
7. T
8. T
9. T
10. T
C. Fillin the blanks.
11. RAM, ROM
12. pen drive
13. auxiliary
14. bit
15. Memory card

## D. Write the full form of the following abbreviations.

1. Read Only Memory
2. Universal Serial Bus
3. Random Access Memory
4. Compact Disc
5. Digital Versatile Disc
E. Answer the following questions.
6. Any physical device capable of storing information temporarily or permanently can be considered as computer's memory. Most modern personal computers have two types of memory- Internal Memory, also known as the Primary or Main memory and External Memory, also known as the Secondary memory or Auxiliary memory.
7. A computer can understand only two states - ON (represented by 1 ) and OFF (represented by 0). Data in the computer's memory is represented by these two digits 0 and 1. These two digits are called Binary Digits or Bits. It is the smallest unit of computer's memory. The amount of data and instructions that can be stored in computer memory is measured in Bytes.
To represent each character in memory, a set of 8 binary digits is used. This set of 8 bits is called a Byte.
8. (a) A device covered with a magnetic coating is called a Magnetic disk.
(b) The Flash Drive is a small portable data storage device integrated with a USB (Universal Serial Bus) connector.
(c) An optical disc is an electronic data storage medium that can be used to write and read using a low powered laser beam.
9. Blu-Ray is an Optical disc storage device used to store a large amount of data or high definition of video recording and playing other media files. It uses laser technology to read the stored data. The Blu-ray Disk can store more data at a greater density as compared to CD/DVD. Blu-ray Discs provide 28 GB of space to store data.
10. 

| RAM | ROM |
| :--- | :--- |
| 1. RAM stands for Random Access <br> Memory. | 1. ROM stands for Read Only Memory. |
| 2. Temporary storage. | 2. Permanent storage. |
| 3. It is volatile in nature. Its contents <br> are erased whtn power is turned off. | 3. It is non-volatile in nature. Its <br> contents are non-erased when <br> poweristurned off. |

competency based questions

1. CD, DVD
2. Use a soft cloth to clean the disc; the disc may have fingerprints or smudges. Examine the disc for any cracks or scratches that might be interfering with playback. Make sure the disc playback is not restricted by parental control options.

A. 1. Compact
3. Bits
4. RAM
5. Pen drive
6. Hard disk
7. Byte
8. ROM

B. Do yourself.
C. Do yourself.

## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (c)
2. (b)
3. (a)
4. (a)
5. (c)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
6. F
7. T
8. $F$
9. T
10. F
C. Fill in the blanks.
11. File Explorer
12. Start
13. secondary
14. Rename
D. Rewrite the jumbled words correctly.
15. $W, ~ I N D W$
16. $E X P B R E R$
17. $D E S M O P$
18. $R E N A M E$
19. $F O D E E$

## E. Answer the following questions.

1. The most significant difference between a file and folder is that a file is collection of related information, while a folder is a container that holds related files and other sub-folders.
2. You can check the file extension from the Type column in Windows file explorer.
3. To change the name of the folder/file follow the given steps :

Step 1 : Right-click on the desired file/folder.
Step 2 : Select Rename option from the shortcut menu.
Step 3 : The name of the folder/file will be highlighted. You can delete the name and type a new name.
4. Step 1 : Place the cursor on the file/folder you want to delete and right click on it.

Step 2 : Select Delete option from the shortcut menu. A confirmation message appears on the screen.
Step 3 : Select Yes option to delete the file/folder. The deleted file/folder will be moved to Recycle Bin.

Shortcut way to delete a file/folder is to drag and drop the file/folder in the Recycle Bin.
5. When you delete a folder, you're also deleting everything inside of it. Deleted folders are sent to the Recycle Bin.

1. (a) Right click on the blank area of the Desktop. A context menu appears.
(b) Click on New option and it will open a submenu with a lot of items.
(c) Choose Folder option. A new folder with name "New Folder" will be placed on the Desktop.
Alternatively,
You can use Ctrl+Shift+N to create a folder.
2. See topic 'Deleting a File/Folder' on Book Page No. 26, 27.
3. To open a file or folder, simply move the mouse pointer to the particular file/folder and double-click on it. The file/folder will open and you can view its contents.
A.

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

B. Do yourself.
C. Do yourself.

MS Word : Text Formatting

## Ixercise

A. Tick $(\checkmark)$ the correct option.

1. (b)
2. (a)
3. (a)
4. (a)
5. (a)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
6. T
7. T
8. F
9. T
10. $F$
C. Fill in the blanks.
11. left
12. Italics
13. Toggle
14. Bullet
15. Line spacing
D. Match the following.


## E. Answer the following questions.

1. Thus formatting means changing the text appearance to make it attractive, by changing its alignment, style, font, size and font colour.
2. The Change case button in the Font group of the Home tab gives you five options to change the case of the typed text. These are as follows:
(a) Sentence case: Capitalized the first letter of every sentence.
(b) lowercase: Each letter of the text appears in the small letters.
(c) UPPERCASE: Each letter of the text appears in capital letters.
(d) Capitalize Each Word : The first letter of each word is capitalized
(e) tOGGLE cASE : Changes the lowercase characters to uppercase and the uppercase characters to lowercase.
3. Line spacing is the vertical distance between successive lines of the text in a document. We can also increase or decrease the line spacing between a paragraph.
4. Alignment is the positioning of text in a document within the margins. In MS Word, we can align the text in four different ways - Left, Right, Center and Justify. In MS Word By default, the text is left aligned.
5. Use Format Painter to quickly apply the same formatting, such as color, font style and size, or border style, to multiple pieces of text or graphics. With Format Painter, you can copy all of the formatting from one object and apply it to another one-think of it as copying and pasting for formatting.
6. Font color is the actual color in which text will appear on your screen. Highlighting color is the shade of a color over your text.

## competency based questions

1. A numbered list is a point-wise list of items where each item is preceded by a number.

The steps to create numbered list are as follows:
Step 1 : Select the text to which you want to add Numbers.
Step 2 : Click the Home tab.
Step 3 : Click on the Numbering button in the Paragraph group.
Step 4 : Select the list style of your choice.
2. See topic 'Applying Border and Shading' on book page no. 38 .
A.

B.

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

C. Do yourself.

## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (c)
2. (b)
3. (a)
4. (b)
5. (a)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
6. T
7. T
8. T
9. $F$
10. $F$
C. Fill in the blanks.
11. .pptx
12. F5
13. Slides pane
14. $\mathrm{Ctrl}+\mathrm{M}$
15. Esc
D. Rearrange the letters to get correct word.
16. $P O W E P O D T$
17. $P R E S N T A N T$
18. $S$ L $L D$
19. $S$ L $L D E D O$
20. $P A B C E D B E D$
E. Answer the following questions.
21. A presentation is a structured delivery of information. It is a systematic display of information along with graphics movies and sounds. All these are displayed together on the screen. So, the file that we make in PowerPoint is called a Presentation.
22. A slide is a single page of a presentation.
23. Placeholders: These are the dotted boxes seen on the slide. This is where you type your text. Placeholders can also contain pictures, charts and other non-text items.
24. To insert a new slide in a presentation, follow the given steps :

Step 1 : Click on the Home tab.
Step 2 : Click on the New Slide button from the Slides group. A list appears.

Step 3 : Choose the option you want to apply. The new slide will be added.

You can also insert a new slide by right clicking in the Slides Pane. Select New Slide option from the pop-up menu.
5. A presentation is made up of several electronic pages called Slides. These slides are grouped together in a sequence to form a slide show. A slide show is an electronic presentation displayed on a computer screen.
6.

| Slide Tab | Slide Pane |
| :--- | :--- |
| It displays the slides of your <br> presentation as small images. This view <br> allows easy navigation through slides. | Slide pane contains the current slide in <br> your presentation. |

Competency based auestions

1. You can enter the text in these placeholders by using the following steps:

Step 1 : Click anywhere inside the Title placeholder, and type the title of your presentation.

Step 2 : Click inside the Subtitle placeholder and type out additional information about the title.

Step 3 : Click anywhere outside the placeholder to finish.
2. We need to save the presentation if we want to use it in future. The steps to save a presentation are given below:
Step 1 : Click on the File tab and Click on the Save option.
Step 2 : Click on the Browse option. The Save As dialog box appears.
Step 3 : Type the file name in the File name box.
Step 4 : Click on the Save button. The presentation will be saved with the name 'presentation' having an extension '.pptx'.

A. 1. Creating a new presentation
2. Saving a presentation
3. Opening a presentation
4. Inserting a new slide
5. Closing PowerPoint

(a) $\mathrm{Ctrl}+\mathrm{O}$
(b) $\mathrm{Ctrl}+\mathrm{M}$
(c) Alt + F4
(d) $\mathrm{Ctrl}+\mathrm{N}$
(e) $\mathrm{Ctrl}+\mathrm{S}$
B. Do yourself.

## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (a)
2. (c)
3. (a)
4. (b)
5. (a)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
6. F
7. T
8. T
9. T
10. F
C. Fill in the blanks.
11. block palette, script area
12. Looks
13. Control
14. Stamps
15. turn Cl 15 degrees
D. Write the functions of these blocks.
16. Shows the sprite on the stage.
17. To create a duplicate copy of the sprite.
18. This block pauses the running of the script for the number of seconds given in the block.
19. It is used to turn the sprite in the opposite direction as it reaches the edge of the stage.
20. Adds a speech bubble to the sprite for the specified period of time.

## E. Answer the following questions.

1. Scratch Blocks menu is organized into 10 colour coded categories: Motion, Looks, Sound, Pen, Data, Events, Control, Sensing Operators and More Blocks.
2. if on edge, bounce
3. Control Block have looking blocks which are used when the same blocks have to be repeated for a number of times.
wit 1 secs and repert 10 are two control blocks.
4. $x=0$ and $y=0$
5. To draw a coloured line, type the given script.


## Competency based auestions

1. Events blocks tell Scratch when to start running the program by setting a triggering moment, such as clicking the green flag. $\qquad$ block activities the script when the green flag or Go button is clicked.
2. Do yourself.

A. 1

2


(4)

(5)

(3)



6

B. Do yourself.

## About Artificial Intelligence

## Exercise

A. Tick $(\Omega)$ the correct option.

1. (a)
2. (b)
3. (b)
4. (b)
5. (c)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
6. T
7. F
8. T
9. T
10. T
C. Fillin the blanks.
11. Creative
12. Al
13. IOT
14. Artificial Intelligence
15. Smart Home
D. Answer in one word.
16. Chatbot
17. Amazon, Flipkart, Snapdeal
18. 'Siri' is used by Apple and 'Google Assistant' is used by Google.
19. Alexa, Echo, Cortana, Google Assistant
20. Smartphone
E. Answer the following questions.
21. Artificial Intelligence is the ability of a machine to think and learn. Artificial intelligence (AI) is an area of computer science that emphasizes the creation of intelligent machines that work and reacts like humans. It is the science and engineering of making intelligent machines, especially intelligent computer programs. It is related to the similar task of using computers to understand human intelligence.
22. Here are some examples of smart home products and their functions.

- Cameras will track your home's exterior even if it's pitch-black outside.
- You can control a thermostat from your bed, the airport, anywhere your smartphone has a signal.
- LED lights to let you program colour and brightness right from your smartphone.

3. An Intelligent Personal Assistant (IPA) is software that has been designed to assist people with basic tasks, usually providing information using the input in the form of natural language.
4. A Chatbot is a computer program designed to simulate conversation with human users, especially over the Internet.
5. When you begin typing a search term and Google makes recommendations for you to choose from, that's Al in action. Predictive
searches are based on data that Google collects about you, such as your location, age, previous searches and other personal details. Using AI, the search engine attempts to guess what you might be trying to find.

Competency based questions

1. Disadvantages of AI devices:
(a) They cannot work outside of what they were programmed for.
(b) No emotions are present in an Al system.
(c) Robots can lead to severe unemployment by replacing their jobs.
(d) Human can become too dependent on AI and lose their mental capacities.
2. No, it is not possible because facebook uses Al to recognize faces.

A. Do yourself.
B. Do yourself.

## Ixercise

A. Tick $(\Omega)$ the correct option.

1. (c)
2. (a)
3. (b)
4. (b)
5. (a)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
6. F
7. T
8. T
9. F
10. T
C. Fill in the blanks.
11. Network
12. URL
13. Website
14. Refresh
15. Search engine
D. Rearrange the letters to get correct words.
16. $N E T W O R$
17. $I N T E R E T$
18. $B, O B E R$
19. $M O D E M$
20. $W E B A T E$

## E. Answer the following questions.

1. The Internet started as ARPANET. In 1970s, the U.S. Defence department established an agency for research and analysis in the field of defence. This agency was named as the Advanced Research Projects Agency or ARPA. ARPA set up a network of computers between different offices of defence department to exchange and share important information. This network of computers was called the Advanced Research Projects Agency Network or ARPANET.
2. (a) A website is a collection of web pages containing related information related to a certain topic. It is like a book having various chapters on different topics. Each website on the internet has a unique name or address. Web pages of website are linked with each other.
(b) The first page of a website, which is displayed by default, is called a home page. We get this page when we open a website.
(c) World Wide Web (WWW) is like a very large library from where we can get different types of information in the form of text, picture, sound, video, etc. It is an electronic library, available on the Internet. It is a series of servers that are interconnected. A lot of information is stored on these servers.
(d) The Internet started as ARPANET. In 1970s, the U.S. Defence department established an agency for research and analysis in the field of defence. This agency was named as the Advanced Research Projects Agency or ARPA. ARPA set up a network of computers between different offices of defence department to exchange and share important information. This network of computers was called the Advanced Research Projects Agency Network or ARPANET.
3. Getting the data from the host computer (server) to the client computer is known as downloading while copying the data from the client computer to the host computer is known as uploading.
4. Each website has a unique address known as Uniform Resource Locator (URL). URL represents the full address of any source located on the computer. You can quickly display any web page if you know its URL.
A URL has three parts:

- Protocol
- Host Name
- File Name

For example, www.cartoonnetwork.com and www.discoverychannel.com are the URLs of Cartoon network and Discovery channel, respectively.
5. A search engine is a website designed to search for information on the World Wide Web. You just enter the keywords and the search engine gets you the relevant information. There are many search engines that you can choose from like., www.google.com www.yahoo.com and www.bing.com.

1. A search engine is a software program that helps people find the information they are looking for online using keywords or phrases. Search engines are able to return results quickly-even with millions of websites online-by scanning the Internet continuously and indexing every page they find.
2. Laptop HP \& Dell.
A.

B. Do yourself.

## TELH TIUCH 5

## Computer History and Development

## Exercise

A. Tick $(\Omega)$ the correct option.

1. (c)
2. (b)
3. (c)
4. (c)
5. (b)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
6. $F$
7. F
8. $F$
9. $F$
10. T
C. Fill in the blanks.
11. Analytical Engine
12. Charles Babbage
13. IBM
14. 1832
15. Analytical Engine
D. Expand the following:
16. International Business Machines
17. Universal Automatic Computer
18. Electronic Discrete Variable Automatic Computer
19. Electronic Numerical Integrator and Calculator
20. Atanasoft-Berry Computer
E. Answer the following questions.
21. Abacus.
22. Mark 1 was the first digital electronic computer which was invented by Howard Aiken.
23. Desktop computers, laptop computers, palmtop computers and tablets are different types of microcomputers.
24. First Generation computers were very big as that of a room, were not reliable, worked slowly, consumed a lot of electricity and generated a lot of heat.
25. Napier's Bones.

Competency based questions

1. Abacus.
2. Artificial Intelligence is shaping the future of humanity across nearly every industry. It is already the main driver of emerging technologies like big data, robotics, smart homes, driverless car, chatbots and IOT, and it will continue to act as a technological innovator for the foreseeable future.
A.


B. 1. Abacus
3. Transistors
C. Do yourself.
4. Pascaline
5. Supercomputers

## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (c)
2. (b)
3. (b)
4. (c)
5. (b)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
6. T
7. F
8. T
9. T
10. T
C. Fill in the blanks.
11. Operating system
12. Microsoft Store
13. Cortana
14. Recycle Bin
15. Start Menu
D. Unscramble the given words:
16. $C O R T A N$
17. $T A S K V E W$
18. $S N A P A S S D T$
19. $W$ M $D O W S H E D O$
20. $T A S B B A$
E. Answer the following questions.
21.     - It is easy-to-use, more interactive, and the most secured version of Windows.

- It is much more personal and provides you with the ability to redecorate your desktop with new backgrounds, themes, colours and icons.

2. The Start menu in Windows 10 is a blend of the old menu, found in Windows 7 and Start screen in Windows 8. When you click on the Start button at the bottom-left of the screen, you get two panels, side-by-side. The left panel displays the pinned, recently added, and most-used apps. The right panel displays a section of the live tiles that you can customise, resize, and reorganise.
3. Task View is a task switcher and virtual desktop system introduced in Windows 10. Task View allows a user to quickly locate and open window, quickly hide all windows and show the desktop, and to manage windows across multiple monitors or virtual desktops.
4. A Universal Windows app is a software application that can run not just on a Windows PC, but also on a Windows tablet, smartphone, or smartwatch as well. Windows 10 provides a bundle of built-in apps, like Photos, Maps, Mail, Alarms, Clock, Calendar, etc. You can find and use these apps from the option in the Start menu.
5. Windows 10 displays the most popular universal apps in the form of resizable live tiles in the right pane of the Start menu. These tiles display the latest updates and information, such as news, weather report, incoming mails, etc., without opening the app. You can rearrange, resize, and move these tiles according to your requirement.
We see Microsoft Edge, Microsoft Store and Weather tiles on our computer Start menu.

## Competency based questions

Cortana

A.

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

B. Do yourself.

## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (a)
2. (c)
3. (a)
4. (b)
5. (c)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
6. F
7. T
8. $F$
9. F
10. T
C. Fill in the blanks.
11. Shapes
12. Thesaurus
13. red
14. Resizing, Rotation
15. Home
D. Read the clues and name the following.
16. Clipart
17. Resizing handles
18. Drag and drop
19. Rotation handles
E. Answer the following questions.
20. See topic 'Pictures' on book page no. 29, 30.
21. Thesaurus allows us to view synonyms (words with similar meaning) of a word.
22. see topic 'Pictures' on book page no. 29, 30 .
23. To move a picture, bring the pointer over it. When the pointer changes shape, to move icons, drag the picture and drop it at a desired location.
24. Thesaurus is a built-in dictionary that enables you to look up synonyms, antonyms, word substitutes and alternate spellings. This feature increases your writing abilities and vocabulary and helps you to better understand the text.

Competency based questions

1. He should use Online Pictures option by selecting the Pictures option from the Illustrations group on the Insert tab.
2. She should use WordArt button in the Text group on the Insert tab.

A. Do yourself.
B. Do yourself.

## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (c)
2. (c)
3. (a)
4. (a)
5. (a)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
6. T
7. F
8. F
9. F
10. T
C. Fill in the blanks.
11. 1.15
12. Page setup, Layout
13. Portrait
14. 0.5
15. Paragraph spacing
D. Match the following icons with their names:
16. Page Border

## E. Answer the following questions.

1. Header and Footer options are used to place some information on top and bottom of every page, respectively. Headers and footers generally contain page number, file name, title of the document, the author's name, the current date and so on.
2. Line spacing means the amount of vertical space between the lines of text while indentation determines the amount of spacing between the text and the page margins.
3. A page break is that place in a document where one-page ends and the next one begins. While typing a document, a page break gets inserted automatically when a fixed number of lines have been typed. However, many times you need to force a page break to suit your requirement.
Page breaks move the text to a new page before reaching the end of a page.
4. Page Orientation is the property to set the printing direction of the text on a paper. The two most common types of orientation are portrait and landscape.
5. Line spacing means the amount of vertical space between the lines of text while paragraph spacing is the amount of vertical space above or below a paragraph.
6. See the topic 'Indentation', 'Setting Margins', 'Paragraph Formatting' of this chapter.
7. Page Layout tab and Page Setup group.

A. 1 .

8. 


5.
A C I

N G
B. Do yourself.

## More About PowerPoint 2016

## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (c)
2. (c)
3. (a)
4. (b)
5. (b)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
6. T
7. F
8. F
9. T
C. Fill in the blanks.
10. Reading
11. Slide Sorter
12. Background
13. Animation
D. Read the clues and name the following.
14. 


2.

3.

4.


## E. Answer the following questions.

1. Side layout is the formatting and positioning of the placeholder boxes for the content that appears on a slide.

PowerPoint includes nine in-built slide layouts.
2. PowerPoint has five presentation views:

Normal view, Outline view, Slide Sorter view, Notes Page view, Reading view.
3. The animation effects are available in the Animations tab and are divided into four categories as given below:

Entrance: This category has effects that control the entry of an object on the slide.

Emphasis: This category has effects that help to highlight an object during the slide show in order to catch the audience attention.

Exit: These effects define how the object would leave the slide.
Motion Paths: This effect is like emphasis effect, but the object moves within the slide along a path or a pattern, such as a circle or a square.
4.
Slide Transition
A transition is the special effects
that occurs when you exit one slide
and move on to the next during a
presentation.

## Slide Animation

An animation is a special effect that applies to a single element on a slide such as text, a shape, an image, and so on

## competency based questions

1. You can change the background color, pattern and texture of a slide. To change the background of a slide, follow the given steps.

Step 1 : Click on Design tab.
Step 2 : Select Format Background option in the Customize group.
A Format Background task pane opens on the right side of the window. It has four Fill effects- Solid Fill, Gradient Fill, Picture or Texture Fill and Pattern Fill.

Step 3 : Click on the radio button of the Fill option you want.
2. Slide Sorter View.
3. See topic 'Applying Themes on Slides' on page 54,55.


## Introduction to MS Excel 2016

## Exercise

A. Tick $(\Omega)$ the correct option.

1. (c)
2. (c)
3. (b)
4. (a)
5. (a)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
6. T
7. $T$
8. T
9. $T$
10. T
C. Fillin the blanks.
11. Rows, Columns
12. Name box
13. single
14. active
15. $\mathrm{Ctrl}+\mathrm{S}$
D. The active cell in a worksheet is $B 7$. Write the location of cells as specified.
16. B6
17. B 8
18. C 7
19. $A 7$
20. D7 (right of B7)

## E. Answer the following questions.

1. A spreadsheet is a tool that is used to store, manipulate and analyze data. Data in a spreadsheet is organized in a series of rows and columns and can be searched, sorted, calculated and used in a variety of charts and graphs.
2. Rows are the horizontal lines in the worksheet, and columns are the vertical lines in the worksheet. A cell is the intersection of a row and a column. A cell is identified by an address that consists of the column name followed by the row number. For example, the first cell is referred to as A1, which indicates that it lies at the intersection of the column A and row 1. This is the active cell.
3. As the name suggest, it is the cell that is currently active or selected. It can be recognized by its green outline. Data can be entered only in the active cell.

It you want to rename a workbook, first locate it in Windows Explorer, then you can press F2, or right-click and select Rename, then type the new name. If your workbook is already open, then you can go to File $\rightarrow$ Save As to save the workbook with a different name.
4. Title Bar, Name Box, View Button, Active Cell.
5. A worksheet is a spreadsheet with rows and columns where you can type and store data, and perform various operations on the data.
A worksheet consists of 1,048,576 rows and 16,384 columns.
To create a new workbook, when the Excel application is already running, follow the given steps:

Step 1 : Click on File tab. A backstage view appears.
Step 2 : Click on New in the left pane. A new pane appears on the backstage view.

## Step 3 : Click on Blank workbook.

## Competency Based questions

1. (a) Click the cell you want to edit.
(b) Click in the formula bar.
(c) Make your changes.
(d) Press Enter.

The cell is updated with the new text.
2. See topic 'Saving A Workbook' on book page no. 67 .
A. EVS-A1

English-E3
G.K. -G4
B. Do yourself.

Computer-C2
Science-G1
Maths-D5
Sanskrit-C8

Hindi-B5
SST-F6
3. NASA's Mars Exploration Mission in 2004 was a robotic space mission involving two Mars rovers, Spirit and Opportunity, to explore planet Mars.
4. Roomba is a series of autonomous robotic vacuum cleaners made by the company iRobot. They have a set of sensors that enables them to navigate the floor area of a home.
5. Al winter is a quiet period for artificial intelligence research and development. Over the years, funding for Al initiatives has gone through a number of active and inactive cycles. The label winter is used to describe dormant periods when customer interest in AI declines.

## Competency based questions

1. Latest Al technology are listed below:

Natural language generation, Speech recognition, Virtual agents, Decision management, Biometrics, Machine learning, Robotics, Deep learning, Selfdriving cars, etc.
2. Projectors, Robotics lab, GPS-tracker, CCTV cameras, Library Management System, Graphic Tablets, Stylus, Wireless microphone, Student Response System, Educational Software, Printer, etc.
A.

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

B. 1 .

C. Do yourself.

## Exercise

A. Tick $(\checkmark)$ the correct option.

1. (a)
2. (c)
3. (c)
4. (a)
5. (a)
B. Write ' $T$ ' for True and ' $F$ ' for False statements.
6. T
7. T
8. $F$
9. $F$
10. F
C. Fill in the blanks.
11. broadband
12. $I S P$
13. Website
14. @
15. attachment
D. Write the full form of following:
16. Internet Service Provider
17. Modulator-Demodulator
18. Bharat Sanchar Nigam Limited
19. Mahanagar Telephone Nigam Limited

## E. Answer the following questions.

1. Dial-up requires users to link their phone line to a computer in order to access the Internet. It doesn't allow users to make or receive phone calls through phone service while using the Internet.
2. 

## Wireless Mobile Internet

Wireless uses radio frequency to connect to the Internet. Wireless connections are possible through the modem, which picks up

It allows users to access the Internet over a smartphone provided offer voice plans with Internet access. internet signals and sends them to computers.
3. E-Mail stands for Electronic Mail. It is a facility on Internet to send and receive messages anywhere around the world in real time. Apart from textual data, we can send images as well as audio and video files through e-mails. These extra files are called attachments.

## Advantages of E-mail

- E-mail is cost effective and fast.
- It can reach any part of the world within a few seconds or few minutes.
- It is a reliable source of communication.
- Any form of data like text, graphics, sound or video can be sent through e-mail.

4. See topic 'Writing and Sending and E-mail' on book page no. 88 .

## competency based questions

1. She should use attachments option to send music file.
2. He should use Bcc (Blind carbon copy) option.
A.

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

A. Do yourself.

