

e-CODE

Windows 10 & MS Office 2016



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Computational Thinking

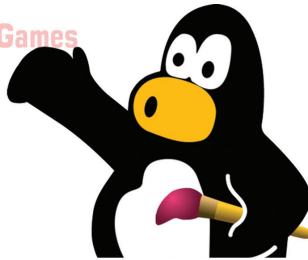
Cyber Ethics

Artificial Intelligence

Data Science

Coding

Board Games



Teacher Manual



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1. LET'S PLAY WITH COMPUTER!



●●● Brain Tuner ●●●

- A. 1. (b) 2. (b) 3. (c) 4. (c) 5. (a)
- B. 1. Three 2. Input 3. Long 4. Think 5. Versatility
- C. 1. (F) 2. (T) 3. (T) 4. (T) 5. (T)
- D. 1. The IPO cycle is the Input and Output after the process of data. It refers to the Input> Process> Output (IPO cycle).
2. Charles Babbage' is known as the father of Computer.
3. (i) Bread (Input)→(Process)→(Toasting)→(Output) Toast.
 (ii) Orange (Input)→(Process)→(Blending)→(Output) Juice
 (iii) Water (Input)→(Process)→(Freezing)→(Output) Ice.
4. (i) High Storage Capacity (ii) Speed
5. (i) Health Problems (ii) Wastage of time and energy.

Fun Time



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2. HARDWARE & SOFTWARE



●●● Brain Tuner ●●●

- A. 1. (c) 2. (b) 3. (c) 4. (c) 5. (c)
- B. 1. CPU 2. Flash drive 3. Headset 4. Application 5. System
- C. 1. (F) 2. (T) 3. (F) 4. (F) 5. (F)
- D. 1. Computer hardware is mainly the electronic and physical parts found in the computer system. Ex- Keyboard, Microphone

2. CPU is the processing device of the computer. It processes data and instructions given by the user. It controls all input, output and storage devices. That is why it is known as the brain of the computer.
 3. A mouse is an input device. It has two buttons: left button and right button with a scroll wheel, It is called a pointing device because it is used to point an object on the screen.
 4. A printer is an output device that uses electronic data stored in a computer to print a hard copy while monitor is an output device that shows information in the form of text and pictures.
 5. Soft copy is a non-printed document file while hard copy is a printed document file.
- E. 1. Speakers 2. Mouse 3. Printer 4. Application Software
5. LED Monitor

Fun Time

1. SOFT COPY 2. TOUCH SCREEN 3. CPU 4. MOUSE
5. CONTROL UNIT 6. PRINTER

Coding Time

Now decode the following.

- (a) * & ! # – BEAR (b) ! @ # – AIR (c) * & % – BED (d) # & % – RED



3. LEARN ABOUT WINDOWS 10



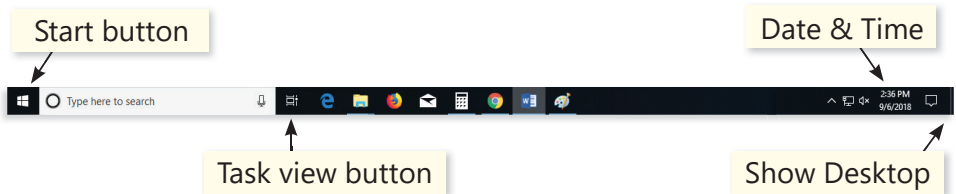
••• Brain Tuner •••

- A. 1. (a) 2. (c) 3. (c) 4. (b) 5. (c)
- B. 1. Taskbar 2. Screen saver 3. Live 4. Show desktop 5. Setting
- C. 1. (F) 2. (T) 3. (T) 4. (T) 5. (F)
- D. 1. Microsoft windows is one of the most popular operating system. It is developed by Microsoft.
2. Start button and Task view button.
3. The small pictures present on the desktop are known as icons.
4. Live Tiles are designed to display "Live" information in the start menu. Ex- Weather, news.

5. A Computer program that blanks the display screen or fills it with moving images when the computer is in use or not for sometime.

- E. 1. Desktop 2. Show desktop button
3. Press Win + R keys on your keyboard

Fun Time



4. ENJOY TUX PAINT

Brain Tuner

- A. 1. (b) 2. (c) 3. (b) 4. (a) 5. (b)
B. 1. Mascot 2. Toolbar 3. Freely 4. Shapes 5. Right
C. 1. (T) 2. (T) 3. (F) 4. (T) 5. (T)
D. 1. Tux paint is a drawing program designed for young children.
2. Magic tool is used to apply magic effects on a drawing. Grass, Real Rainbow, etc. are tools under this category.
3. Eraser tool is used to erases a part of drawing or the whole drawing.
4. It is used to place stickers on the drawing area.
5. Paint Brush tool is used to create a new drawing in Tux paint.

5. MICROSOFT WORD 2016

Brain Tuner

- A. 1. (c) 2. (a) 3. (a) 4. (a) 5. (c)
B. 1. Title bar 2. Home 3. Italics 4. Cursor 5. Delete
C. 1. (F) 2. (T) 3. (F) 4. (T) 5. (T)
D. 1. MS Word 2016 is an application software used for word processing. It was introduced by Microsoft Corporation.

2. (i) It is easy to use application software.
(ii) Copy and move the text from one location to another.
3. It indicates information about the current document.
4. There are two types of rulers:
(a) Horizontal ruler (b) Vertical ruler
5. Go to Format> Font> Font + D to open the font dialogue box. Select the font and size you want to use. Select Default, and then select yes.

Fun Time

1. Ctrl + B 2. Ctrl + S 3. Ctrl + U 4. Ctrl + I 5. Ctrl + N 6. Ctrl + A

Coding Time

1. 423 2. @#!&



6. MORE ON MS PAINT








••• Brain Tuner •••

- A. 1. (b) 2. (a) 3. (a) 4. (c) 5. (c)
- B. 1. Home 2. Zoom in 3. Rectangular 4. Full Screen 5. Invert
- C. 1. (F) 2. (T) 3. (T) 4. (F) 5. (T)
- D. 1. Copy 2. Select all 3. Free-form Selection 4. Text
5. Rotate/Flip 6. Delete

Fun Time

1. (i) Select (ii) Right (iii) Skew, Horizontal, Vertical (iv) Ok
2. (i) Select (iii) Cut (iv) Copy, Upper-left

Coding Time

1.    - I am not sad
2.   - I am happy



7. INTRODUCTION TO SCRATCH



••• Brain Tuner •••

- A. 1. (a) 2. (c) 3. (c) 4. (b) 5. (c)
- B. 1. Scratch 2. Connect 3. .sb3 4. Stage 5. Title bar
- C. 1. (F) 2. (T) 3. (T) 4. (T) 5. (T)
- D. 1. Scratch is a simple programming language specifically used for educational purposes. It allows you to create interactive stories, animations, and games.
2. (a) Sprite is a small graphic character that performs actions on the stage.
- (b) Blocks palette is displays the sets of blocks present under the connect block category.
- (c) Stage is the main working area where you can see whatever you create stories, games, etc.
3. (i) Title bar- It is present at the top of the scratch windows. It displays name of the program.
- (ii) Sprite area- It displays the thumbnails of the sprites used in a project.
4. The script area is the big, gray box on the right side of the screen while sprites is the area in the bottom of the left corner.
5. Motion blocks are used to control the movements of a sprite.

Fun Time

1. This block rotates the sprite in the left direction by the specified degrees.
2. This block erases all the pen marks from the stage.
3. This block changes the thickness of the sprite's pen by a specified value.
4. This is one of the most popular motion block used in game design.



8. WORKING WITH SPRITE



••• Brain Tuner •••

- A. 1. (b) 2. (c) 3. (c) 4. (a) 5. (a)
- B. 1. Sprites 2. Backdrop 3. Arctic 4. Orange 5. Stop
- C. 1. (F) 2. (T) 3. (T) 4. (T) 5. (T)
- D. 1. A backdrop is one out of many backgrounds available for the stage in Scratch.
2. Step(i) Press the backdrop button near the sprites.
Step(ii) Go to costumes of backdrop to add more backdrops.
3. The Look block includes the blocks that control the looks of the sprite.
4. Start sound and play sound are the two examples of Sound block.

5.

Block	Description
	This block executes the blocks inside it for a specified number of times.
	This block changes the sprite's size by the specified amount.
	This block stops all the sounds that are currently playing.
	This block plays the sound selected from the drop-down list of the block without pausing the script.

REVISION SHEET-1

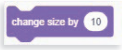
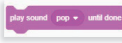



- A. 1. (c) 2. (c) 3. (c) 4. (a) 5. (b)
- B.

1. Mouse	•	→	degrees
2. Android	•	→	smartphone
3. Flip horizontal	•	→	pointing device
4. Skew	•	→	mirror image of the drawing
5. Touch screen	•	→	operating system
- C. 1. Liquid Crystal Display 2. Visual Display Unit
3. Central Processing Unit 4. Light Emitting Diode
5. Cathode Ray Tube

- D. 1. Microphone 2. Screen saver 3. Paste 4. Keyboard 5. Select all
- E. 1. Icons
 2. Right Click blank area on the Taskbar > Taskbar setting > Personalization > Taskbar Behaviour > Set Taskbar alignment to left.
 3. Free-form Selection 4. Keyboard 5. Pen drive

REVISION SHEET-2

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

B. 1.  2.  3.  4.  5. 

Sound
 Motion
 Pen
 Control
 Looks

- C. 1. Text 2. Toolbar 3. Ctrl + S 4. Cursor 5. Blocks

- D. 1. Italics 2. Underline 3. Text 4. Bold

- E. 1. Say () block 2. Ctrl + N 3. Keyboard

4. Wavelets effect.

5. Yes, Save tool can save a drawing in Tux paint

Cyber Olympiad

1. (a) 2. (a) 3. (b) 4. (c) 5. (b) 6. (c) 7. (d) 8. (c) 9. (c) 10. (a)
 11. (a) (12.) (b) 13. (c) 14. (b) 15. (d) 16. (b) 17. (b) 18. (d)
 19. (d) 20. (c)