

Windows 11
Office 21

Pixel

A Book of **Computer Science**

5



1. Computer : History and Generations

Assessment Zone

- A. 1. (b) 2. (c) 3. (a) 4. (a) 5. (c)
B. 1. T 2. F 3. T 4. F 5. T
C. 1. Chinese 2. Pascaline 3. Charles Babbage
4. research and development
D. 1. Input device, Storage Unit, Processor, Control Unit and Output Device.
2. Microprocessor is a single chip that does all the processing. It is used in fourth generation computers.
3. The main goal of the fifth generation is to develop the computers that can respond to natural language and are capable of learning and taking their own decisions.
E. Abacus.

Fun Zone

Generation	Period	Technology
1 st	1946-1958	Vaccum Tubes
2 nd	1959-1964	Transistors
3 rd	1965-1970	Integrated Circuit
4 th	1971 Onwards	Microprocessor
5 th	Present & Beyond	Artificial Intelligence



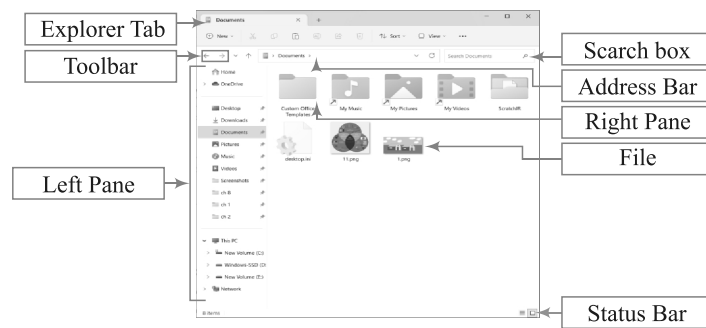
2. Windows–File Management

Assessment Zone

- A. 1. (b) 2. (c) 3. (a) 4. (a) 5. (b)
B. 1. T 2. F 3. F 4. T 5. T
C. 1. icons 2. Subfolder 3. Navigation and Right
4. Ctrl + A

- D.** 1. Document, Pictures, Music, Videos and Downloads.
 2. File Explorer is very helpful for efficiently organizing files and folders that are stored in different disk drives of a computer. You can move, rename and delete files in File Explorer.
 3. **To rename a folder :**
 (i) Open the folder that contains the file you want to rename.
 (ii) Click the file you want to rename.
 (iii) Press **F2** key on the keyboard.
 (iv) Type a new name for the file and then press the **Enter** key.
 4. Recycle Bin is a folder containing deleted files or folders that are no longer required in the memory of the computer.
- E.** Go to Recycle Bin → Select File and Right click on it → Choose Restore option.

Fun Zone



3. Word–Table and Mail Merge

Assessment Zone

- A.** 1. (b) 2. (b) 3. (c) 4. (c) 5. (a)
- B.** 1. T 2. T 3. F 4. T 5. T
 6. T
- C.** 1. Format Painter 2. 0.5 inch 3. triple-click
 4. Data Source 5. Mailing
- D.** 1. Format Painter tool is used to copy the formatting that we have already applied to a portion of the text.
 2. The five different type of tab settings are : Left Tab, Right Tab, Center Tab, Decimal Tab and Bar Tab.
 3. We need table to organize information into rows or columns.

- 4. The three ways to create a table in word are : Creating a blank table, inserting a preset table and drawing a customized table.
- 5. Mail Merge feature produces a personalized letter for each person on mailing list.
- E. Using Mail Merge.



4. PowerPoint : Creating Presentation

Assessment Zone

- A. 1. (a) 2. (c) 3. (a) 4. (c) 5. (a)
6. (b)
- B. 1. T 2. F 3. F 4. T 5. F
- C. 1. Design 2. SmartArt 3. .pptx 4. Slide Show
- D. 1. The five presentation views are available in PowerPoint.
These views are : Normal, Outline, Slide Sorter, Reading and Slide Show.
- 2. Content placeholder enables us to insert text or one of the eight graphical objects in our presentation quickly and effectively.
- 3. Inserting a SmartArt in presentation helps us to communicate graphically with our viewers.
- 4. The Slide Show view is used to view the presentation in full screen.
- E. Transition Effect.

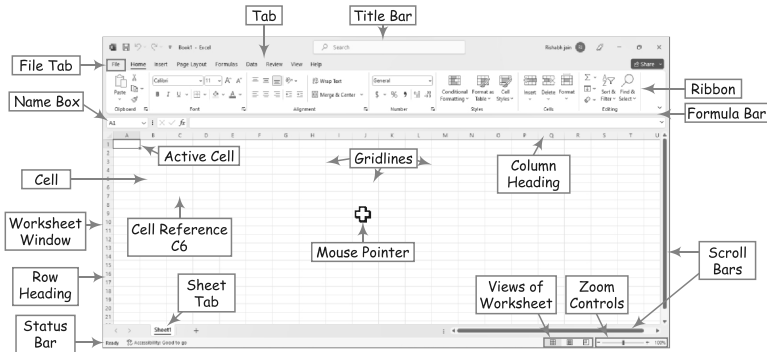


5. Excel : Introduction

Assessment Zone

- A. 1. (a) 2. (b) 3. (b) 4. (b) 5. (a)
- B. 1. F 2. T 3. F 4. F 5. T
- C. 1. Cell 2. 16384, 1048576 3. dark border
4. Formula Bar 5. Cell Reference
- D. 1. Microsoft Excel is a powerful spreadsheet program that allows us to organize data.
- 2. We need to save a workbook for future use.
- 3. Generating a series saves our time and make worksheet accurate.
- E. Border.

Fun Zone



6. Internet : Electronic Mail (E-Mail)

Assessment Zone

- A. 1. (a) 2. (b) 3. (a) 4. (b) 5. (a)
- B. 1. F 2. F 3. T 4. F 5. T
6. T
- C. 1. E-mail 2. eight 3. Emotions 4. Abbreviations
5. Subject
- D. 1. E-mail is extremely fast (ii) E-mail is convenient and economical.
2. The purpose of attachment in an e-mail is to make the message clean, concise and effective.
3. (i) The e-mail message should not be in capital letters.
- (ii) Open only those email attachments that come from trusted sources.
- (iii) Do not click on web links sent by someone you do not know.
- (iv) If we use a public computer for e-mail, make sure to sign out.
- (v) If we suspect an email to be **spam**, do not open or respond; just delete it.
- E. Using Attach File button, he can send his photograph.

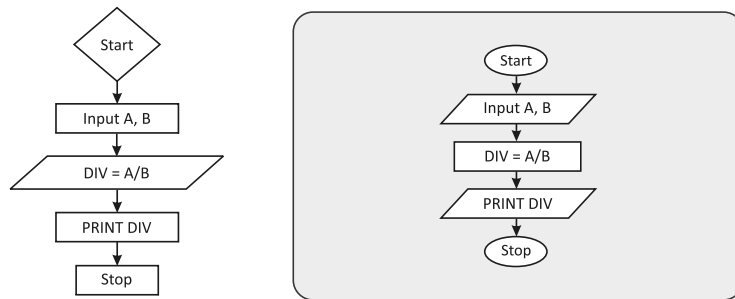


7. Programming Basics

Assessment Zone

- A. 1. (a) 2. (b) 3. (a) 4. (c)
- B. 1. F 2. T 3. F 4. F 5. F
- C. 1. Herman Goldstine and John Von Neumann
2. Decision-Box 3. fifth 4. programming
5. Assembler
- D. 1. Start/Stop 2. Input/output box
3. Decision box 4. Connector
- E. 1. A flowchart is a diagrammatical representation of an algorithm.
2. A computer language, also known as programming language, is a special language understood by the computers. It consists of a set of words, symbols and codes that is used to write a computer program.
3. A language processor is a software that converts source program into machine language because a computer does not understand the program written in HLL or assembly language; it understands only machine language. **Compiler** and **interpreter** are the examples of language processors.
- F. Using compiler (By compiling the program)

Activity Zone



8. Scratch 3 Programming

Assessment Zone

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

- B.** 1. F 2. F 3. T 4. T 5. T
- C.** 1. defining 2. Sensing 3. sequential
4. repeat 5. Broadcast
- D.** 1. Variables are the names you give to computer memory locations which are used to store value (data/information) in a computer program.
2. A conditional statement tells the program which action to take, based on a certain condition. Scratch provides us different commands by which we can control the flow of execution.
3. Broadcast is a message that is sent to notify the script that an event has happened.
- E.** Addition Operator Block.







9. Domains of Artificial Intelligence

Assessment Zone

- A.** 1. (b) 2. (a) 3. (c) 4. (c) 5. (a)
- B.** 1. T 2. F 3. T 4. F 5. T
- C.** 1. Alexa 2. faces 3. break 4. emotions
- D.** 1. Clinical Trial Matching (CTM) system developed by IBM Watson uses AI technology to read patients' data from a larger system with right clinical study to help doctors in selecting the correct, individually customized treatment plan for every patient.
2. (i) Humans can do error while doing tasks but the use of AI significantly reduces errors and increases accuracy and precision.
(ii) Humans can overcome many risky tasks by letting AI robots do such tasks for them, whether it be defusing a bomb, going to space or mining for coal and oil.
3. (i) AI cannot work or think outside the box. It is capable of thinking with pre-fed data and past experiences.
(ii) AI is slowly replacing humans with robots to do a number of repetitive tasks.
4. Data Science, Computer Vision and Natural Language Processing.
- E.** Natural Language Processing.

Fun Zone

Application	Domain of AI
 Chatbot	Natural Language Processing
 Self-driving car	Computer Vision
 Virtual assistant	Natural Language Processing
 Biometric system	Data



Half-Yearly Model Test Paper

Chapter 1-4

- A.** 1. (b) 2. (a) 3. (c) 4. (b) 5. (c)
6. (a) 7. (a) 8. (b)
- B.** 1. F 2. F 3. T 4. F 5. T
6. F 7. F
- C.** 1. Pascaline 2. natural 3. icons 4. ctrl+A
5. triple-click 6. Mailing 7. .pptx 8. cell
- D.** 1. **Abacus** : Abacus was the first calculating device invented about 5000 years ago by the Chinese.
2. **Microprocessor** : Microprocessor is a single chip that does all the processing.
3. **Folder** : A folder is a location for organizing your files. A similar group of files saved together under a common name is called a folder.
4. **Thesaurus** : With Thesaurus, you can look up for synonyms (words with the same meaning) for words in a document.

5. **Mail Merge** : It is used to create personalized letters, mailing labels and envelopes for each person on your mailing list.
 6. **Template** : Templates provide a quick way to create a new PowerPoint presentation. They contain layouts, theme colors, fonts, effects, background styles and the content.
 7. **Formula Bar** : It is used to enter and edit formulas and perform calculations on your worksheet data.
- E.**
1. Input device, Storage unit, Processor, control unit and output device.
 2. There are five different generations of computer :
 - (a) First Generation Computer (1946-1958)
 - (b) Second Generation Computer (1959-1964)
 - (c) Third Generation Computer (1965-1970)
 - (d) Fourth Generation Computer (1971-onwards)
 - (e) Fifth Generation Computer (Present and Beyond)
 3. The main goal of the fifth generation is to develop the computers that can respond to natural language and are capable of learning and taking their own decisions.
 4. Recycle Bin is a folder containing deleted files or folders that are no longer required in the memory of the computer.
 5. To rename a file/folder :
 - (a) Open the folder that contains the file you want to rename.
 - (b) Click the file you want to rename.
 - (c) Press F2 key on the keyboard.
 - (d) Type a new name for the file and then press the Enter key.
 6. Format Painter tool is used to copy the formatting that we have already applied to a portion of the text.
 7. The five different type of tab settings are : Left Tab, Right Tab, Center Tab, Decimal Tab and Bar Tab.
 8. The five presentation views are available in PowerPoint. These views are : Normal, Outline, Slide Sorter, Reading and Slide Show.
 9. Generating a Series saves our time and make worksheet accurate.



Annual Model Test Paper

Chapter 5-8

- | | | | | | |
|-----------|--------|--------|--------|--------|--------|
| A. | 1. (a) | 2. (b) | 3. (a) | 4. (c) | 5. (b) |
| | 6. (b) | 7. (a) | 8. (a) | | |
| B. | 1. T | 2. T | 3. F | 4. F | 5. F |
| | 6. T | 7. F | 8. F | | |

- C. 1. Abbreviations 2. Subject 3. fifth
 4. Assembler 5. flowchart 6. Broadcast
 7. faces 8. break
- D. 1. ASAP 2. BTW 3. CYA
 4. DK
- E. 1. An e-mail address is a combination of a username and a domain name.
 2. Attachment is used to send a file prepared in any program with your e-mail.
 3. A message written in capital letters is called shouting.
 4. An assembler is a program used to translate assembly language into machine language so that the computer can understand it.
 5. Variables are the names you give to computer memory locations which are used to store value (data/information) in a computer program.
 6. The discipline of teaching machines how to see and perceive the human world is known as computer vision.
- F. 1. We can create, send, receive and manage an e-mail message by using different programs such as windows Mail, Outlook, Hotmail and Gmail.
 2. The different parts of an e-mail message are :
- From**
 It refers to the person who is sending the e-mail message; his or her e-mail address is typed in this section.
- To**
 The e-mail address of a person who shall be receiving the e-mail message should be typed in this section.
- Cc**
 Cc stands for carbon copy. It is an exact copy of the message. The e-mail address of a person, who is not directly involved but you would like the message to be sent to him/her too, should be typed in this section.
- Bcc**
 Bcc stands for blind carbon copy. You can take the help of Bcc if you want to send the message to several people, without showing them that others have also received the same message.
3. An Algorithm is a step-by-step procedure to carry out any particular task, such as a mathematical or a logical problem.
4. Advantages of Flowchart :
- (a) Flowchart helps in solving a problem or carry out procedure in a more systematic way.
 (b) It is a better way of communicating the logic of a system.

- (c) It acts as a guide during the program development phase.
- (d) It helps in finding out errors.
- 5. A Conditional statement tells the program which action to take, based on a certain condition. Scratch provides us different commands by which we can control the flow of execution.
- 6. Broadcast is a message that is sent to notify the script that an event has happened.
- 7. Two disadvantages of Artificial Intelligence :
 - (a) **Makes Human Lazy** : With the help of AI, we do not memorize things or do calculations and use our brains less and less.
 - (b) **Imotionless** : Machines cannot experience human emotions and moral values. They perform actions according to the pre-fed instructions.
- 8. Three domains of Artificial Intelligence are Data Science, Computer Vision (CV) and Natural Language Processing (NLP).

