Computer-Genius

(A Book of Computer Science)

Help Kit : 6-8

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Computer-6

1 Computer Language

Assessment

A. Multiple Choice Questions :

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

B. Fill in the blanks :

Ans. 1.   The first generation of computer languages consisted of **Machine language**.
     2.   In **Basic** language machine codes are substituted by symbolic codes.
     3.   **Procedure** languages specify instructions that are more like natural languages.
     4.   **BASIC** is mainly used in microcomputers in earlier days.
     5.   **COBOL** language is poor at complex, mathematical calculations.
     6.   **FORTRAN** language is especially useful in processing numeric data.

C. True and False :

Ans. 1. T   2. T   3. T   4. T   5. T   6. T

D. Application based questions :

Ans. 1.   C++   2.   Fourth Generation

E. Answer the following questions :

Ans. 1.   The term low level means closeness to the way in which machine understand.
     2.   Machine language is the lowest-level computer language, consisting of the internal representation of instructions and data. This machine code the actual instructions understood and directly executable by the central processing unit is composed of binary digits.
          An assembly language is the next level up from machine language. It is still considered a lower-level language but is more user-friendly because it represents machine language instructions and data locations in primary storage by using mnemonics, or memory aids, which people can more easily use. Assembly languages are considered second-generation languages.
     3.   Programming in a higher-level language (i.e., a user-oriented language) is easier and less time consuming, but additional processor time is required to translate the program before it can be executed. Therefore, one trade-off in the use of higher-level languages is a decrease in programmer time and effort for an increase in processor time needed for translation.
     4.   BASIC (Beginners All Purpose Symbolic Instruction Code) : BASIC and Pascal are used primarily in education to teach programming. BASIC (Beginners All-purpose Symbolic Instruction Code) was developed in 1964 by John Kemeny and Thomas Kurtz to teach students at Dartmouth College how to use computers. BASIC is easy to use but does few computer processing tasks well, even though it does them all. Different versions of

BASIC exist. It is mainly used in microcomputers in earlier days.

COBOL (Common Business Oriented Language) was developed in the early 1960s by a committee representing both government and industry.

FORTRAN (Formula Translation) : Fortran was one of the most popular languages among scientific community. It was developed in 1956 to provide an easy way of writing scientific and engineering applications. FORTRAN is especially useful in processing numeric data. Some business applications can be written in FORTRAN, and contemporary versions provide sophisticated structures for controlling program logic.

C & C++ : C is a powerful and efficient language developed at AT&T's Bell Labs in the early 1970s. It combines machine portability with tight control and efficient use of computer resources, and it can work on a variety of different computers. It is used primarily by professional programmers to create operating systems and application software, especially for PCs.

5. The software (set of programs) that reads a program written in high level language and translates it into an equivalent program in machine language is called as Compiler.

    The software (set of programs) that reads a program written in assembly language and translates it into an equivalent program in machine language is called as Assembler.

Activity

Ans. Do it yourself

2 More on Windows-10

Assessment

A.   Multiple Choice Questions :

Ans 1. d.   2. b.   3. d.   4. c.   5. a.   6. b.

B.   Fill in the blanks:

Ans. 1.   A green **checkmark** means that the document or folder is in sync with the online version.

2.   **Windows store** serve as the unified storefront for all Windows apps.

3.   The three main security tools are : **User Account Control, Windows Defender** and **Windows firewall**.

4.   **Windows Defender** allows you to scan your computer for malicious software, while also checking each file or program you open.

5.   **Windows Firewall** is turned on to protect your computer and your network.

6.   Windows 10 includes the first version of Microsoft's new browser **Edge**.

C.   True and False :

Ans. 1. F   2. T   3. T   4. T   5. T   6. F

D.   Answer the following questions :

Ans. 1.   Quick Actions are a set of tiles that give you access to frequently used

settings and tasks (like Wi-Fi connection, or screen brightness).

Most of the actions can be configured simply by clicking or tapping on the tile. Additional settings and options can be accessed if you right-click the tile.

2. By signing in with a Microsoft or Outlook account, you have access to OneDrive from your Windows 10. OneDrive is a free storage space in the Cloud given to every user of a Microsoft account.

3. UWP means that an application designed for your computer can also work in a Windows Phone, an Xbox, or any other Windows-compatible devices.

4. It allows you to have multiple desktop screens, where you can keep open windows organized.

5. Windows Defender is an antivirus and malware protection included in your operating system. It allows you to scan your computer for malicious software, while also checking each file or program you open.

6. Windows Firewall prevents unauthorized access from outside to get into your computer. By default, it is turned on to protect your computer and your network.

7. • Back : Takes you to the previous web page.
    • Forward : Takes you to the next web page.
    • Refresh : Reloads the web page.
    • New tab : Add another tab to see a different web page.
    • Hub (Favorites and History) : See lists of favorite web pages and history of visited web pages.
    • Web Notes : Make Web Notes on the web page.
    • Share : Share the web page via e-mail or other methods.
    • More options : See more options to configure the browser.

8. **Wired Connection (Ethernet)**
    If your network connection is through cable, you can access its settings by going to the SETTINGS window, and selecting Network & Internet.
    Wireless Connection (Wi-Fi)
    If your connection is wireless, clicking on the wireless icon will show you details of your connection as well as other wireless networks available.

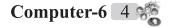**Activity**
Ans. Do yourself

3 MS Word 2010-Advanced

Assessment

A. **Multiple Choice Questions :**
Ans. 1. b.   2. a.   3. b.   4. a.   5. b.   6. a.
B. **Fill in the blanks :**
Ans. 1. With the **mail merge**, you can create a batch of personalized letters or emails to send to your professional contacts.

2. Your **merge document** is a combination of the main document and the mailing list.

3. A **Task pane** appears to the right of the document and is visible throughout the entire Mail Merge procedure.
4. **More items** option to insert individual merge fields.
5. The **mail merge** file will hold special symbols, which will substitute the name and address and other relevant information stored in the data file.
6. **Letters** create and print a batch of personalized letters for everyone on your mailing list.

C.   True and False :

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

D.   Answer the following questions :

Ans. 1.   With the mail merge process, you can create a batch of personalized letters or emails to send to your professional contacts. Each letter or email can include both standard and custom content.
2.   With the use of mail merge you can create letters, Email, Envelopes and labels.
3.   Information is organised in a data file in form of table :
4.   Main document is created by following :
From the mailing tab select start mail merge and select document type.
Select document type.
Select starting document.
Select recipients.
5.   Data source is a file that contain the recipient's names and addresses.
6.   Merge field is a combination of the main document and the mailing list.
7.   The variety of formats of data file are :
•   Microsoft Excel Spread Sheet
•   Microsoft Outlook Contact List
•   Word Data File

Activity
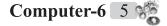
Ans. Do yourself

4 Microsoft PowerPoint 2010

Assessment

A.   Multiple Choice Questions :

Ans. 1. d.   2. b.   3. d.   4. d.   5. b.   6. c.

B.   Fill in the blanks :

Ans. 1.   **Tables** allow information to be segregated making them easy to read.
2.   If you want to carry out some calculations you can insert an **Excel Spread Sheet** instead of a regular table.
3.   **Header Row** adds a different shade to the first row to distinguish it in a table.
4.   **Charts** are an effective way of representing data.
5.   The PowerPoint chart formatting features have been grouped under three

ribbons: **Design**, **Layout** and **Format**.

6. **Spilt Cells** allows you to specify the number of rows and columns into which the current section of cell(s) need to be split.

C. **True and False :**

Ans. 1. T   2. T   3. T   4. T   5. T   6. T

D. **Answer the following questions :**

Ans. 1. Tables allow information to be segregated making them easy to read.

2.

Feature	Sub Features	Description
Table Style Options	Header Row	Adds a different shade to the first row to distinguish it.
	Total Row	Adds a different shade to the last row to distinguish it.
	Banded Rows	Shades alternate rows in the table with the same colour.
	First Column	Adds a different shade to the first column to distinguish it.
	Last Column	Adds a different shade to the last row to distinguish it.
	Banded Columns	Shades alternate columns in the table with the same colour.

3.

Feature	Sub Features	Description
Table Styles	Shading	Offers different shades to be added to selected table/ row/ column/ cell. You can pick from solid shade, texture, image or gradient shading.
	Border	Offers different border options for the table. You can edit the border colour, thickness and style.
	Effects	Offers the ability to create table shadow or reflection. You can also create bevels for individual cells.

4. Charts are an effective way of representing data. Long list of confusing numbers can instantly become trends which can be spotted when they are captured as charts. PowerPoint supports addition and formatting of charts.

5.

Feature	Sub Features	Description
Type	Change Chart Type	Change the chart type retaining the same data.
	Save As Template	Save current chart type as a template.
Data	Switch Row/ Column	Transpose current excel data - this is enabled when you have the source data excel sheet open.
	Select Data	Change the data range covered in the chart.

	Edit Data	Change the chart source data.
	Refresh Data	Refresh the chart to show the latest data.
Chart Layouts	Chart Layouts	Offers list of predefined layouts which can be instantly applied to current chart with a single click.
Chart Styles	Chart Styles	Offers list of predefined styles which can be instantly applied to current chart with a single click.

6. PowerPoint offers a unique feature called Smart Art which allows users to add text to predefined art designs. The advantage with Smart Art, although each component of the Smart Art can be edited individually, you can also modify the SmartArt as a whole while retaining the settings on each individual component.

7.

Feature	Sub Features	Description
Layouts	Layouts	Allows you to change the layout of SmartArt graphics to one from the list.
Smart Styles	Change Colors	Change the color scheme for the SmartArt graphics.
	SmartArt Styles	Allows you to change the SmartArt graphics styles to one of the predefined ones from the list with one click.

Activity
Ans. Do yourself

5 Computer Language

Assessment

A. Multiple Choice Questions :
Ans. 1. c.   2. d.   3. c.   4. a.   5. a.   6. d.

B. Fill in the blanks :
Ans. 1. PowerPoint offers **animation** support which can be used effectively add some motion in a monotonous presentation and make it more interesting.
2. **Entrance** will cause the object to appear in the screen.
3. **Exit** will cause the object to disappear from the screen.
4. **Start After Previous** will cause the animation to begin after the previous animation ends.
5. You can also modify the transition timing settings from the **Timing** section.
6. PowerPoint supports **multimedia** in the slides.

C. True and False :
Ans. 1. T   2. T   3. T   4. T   5. F

D. Answer the following questions :

Ans. 1. PowerPoint offers animation support which can be used effectively add some motion in a monotonous presentation and make it more interesting. Animation can be applied to any object on the slide and the motions can the automated, timed or trigger.

2. Entrance will cause the object to appear in the screen.

3. Emphasis will cause the object to emphasis without appearing or leaving the screen.

4. Animation pane provides the list of animation present in power point.

5. PowerPoint supports slide transition feature which allows you to specify how should the slides transition during the slide show.

6. Multimedia is collection of Text, Effect, Sound, Image, Video etc.

Activity

Ans. Do yourself

6 Microsoft Excel-2010

Assessment

A. Multiple Choice Questions :

Ans. 1. d.   2. c.   3. b.   4. d.
5. c.   6. c.   7. d.   8. c.

B. Fill in the blanks :

Ans. 1. **Microsoft Excel** is a commercial spreadsheet application, written and distributed by Microsoft for Microsoft Windows and Mac OS X.

2. **Quick Access Tool bar** provide a convenient resting place for the Excel's most frequently used commands.

3. **Tabs** appear across the top of the Ribbon and contain groups of related commands.

4. **Page Break** view shows a preview of where pages will break when printed.

5. The flashing vertical bar is called the **insertion point** and it represents the location where text will appear when you type.

6. **Status Bar** displays the sheet information as well as the insertion point location.

7. **Columns** are numbered from A onwards and keeps on increasing as you keep entering data.

C. True and False :

Ans. 1. F   2. T   3. T   4. T
5. T   6. F   7. T   8. T

D. Answer the following questions :

Ans. 1. Microsoft Excel is a commercial spreadsheet application, written and distributed by Microsoft for Microsoft Windows and Mac OS X.

2. Spreadsheet is a tool capable of performing calculations, analyzing data and integrating information from different programs.

3. Workbook is collection of worksheets.
4. When you start MS-Excel, three new blank sheet opens, Individual sheet is called a worksheet where you conduct your work.
5. Quick Access Toolbar
   You will find this toolbar just above the File tab and its purpose is to provide a convenient resting place for the Excel's most frequently used commands. You can customize this toolbar based on your comfort.
6. Ribbon contains commands organized in three components :
   Tabs : They appear across the top of the Ribbon and contain groups of related commands. Home, Insert, Page Layout are the examples of ribbon tabs.
   Groups : They organize related commands; each group name appears below the group on the Ribbon. For example, group of commands related to fonts or group of commands related to alignment etc.
   Commands : Commands appear within each group as mentioned above.
7. View Buttons
   The group of three buttons located to the left of the Zoom control, near the bottom of the screen, lets you switch among Excel's various sheet views.
   Normal Layout view : This displays the page in normal view.
   Page Layout view : This displays pages exactly as they will appear when printed. This gives a full screen look of the document.
   Page Break view : This shows a preview of where pages will break when printed.
   (L) Dialog Box Launcher
   This appears as a very small arrow in the lower-right corner of many groups on the Ribbon. Clicking this button opens a dialog box or task pane that provides more options about the group.

Activity
Ans. Do yourself

7 Editing A Worksheet

Assessment

A. Multiple Choice Questions :
Ans. 1. b.   2. c.   3. c.   4. b.
      5. a.   6. a.   7. c.

B. Fill in the blanks :
Ans. 1. MS Excel cell can have Text, Numeric value or **Formulas**.
      2. Each row is identified by **row number**, which runs vertically at the left side of the sheet.
      3. In MS Excel 2010, Row numbers ranges from **1 to 104857**.
      4. In MS Excel 2010 Columns ranges from **A to XFD**.
      5. The intersection of rows and columns is called **cell**.
      6. If you want to find text in formula as well, then select **Look In** option.

C. True and False :
Ans. 1. T   2. T   3. F   4. F   5. T   6. F

D. Answer the following questions :

Ans. 1. For inserting formula in MS Excel go to the formula bar, enter the formula and then press enter or navigation key.

2. Each row is identified by row number, which runs vertically at the left side of the sheet.
Each column is identified by column header, which runs horizontally at the top of the sheet.

3. **Navigation with Rows and Columns**
- Let us see how to move to the last row or the last column.
- You can go to the last row by clicking Control + Down Navigation arrow.

4. The intersection of rows and columns is called cell.
Cell is identified with combination of column header and row number.
For example : A1, A2.

5. **Merge Conditional Formatting :** This icon is displayed only when the copied cells contain conditional formatting. When clicked, it merges the copied conditional formatting with any conditional formatting in the destination range.

6. **Transpose :** Changes the orientation of the copied range. Rows become columns, and columns become rows. Any formulas in the copied range are adjusted so that they work properly when transposed.

7. When you want to change an existing word with a new word then you should use Find. Replace in Excel.

8. If you want to insert some symbols or special characters that are not found on the keyboard in that case you need to use the Symbols option.

Activity

Ans. Do yourself

8 Log On to Flash CS3

Assessment

A. Multiple Choice Questions :

Ans. 1. d.   2. c.   3. c.   4. c.   5. d.

B. Fill in the blanks :

Ans. 1. By setting the **stroke to No stroke** the circle will simply have a fill colour and no border.

2. There are two parts to the Flash workspace : **stage area** and **paste board**.

3. **Drawing** tools allow you to create and edit objects.

4. The **View** tools comprise the **Hand** tool which is used to scroll around the screen.

5. **Cookie cutting** causes one object to replace part or all of another object when it is placed over the first object.

C. True and False :

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

D. Answer the following questions :

Ans. 1. Adobe Flash CS3 is a design tool set up primarily to allow the efficient

creation of animations, especially for web pages. It has been developed to allow animations to be reduced to the lowest size possible so that the speed of operation within a web site is not too slow.

2. There are two parts to the Flash workspace which is at the centre of the screen:
    •   The STAGE AREA which is the white area.
    •   The PASTEBOARD which is the grey area that surrounds the stage.

3. Flash provides all the tools needed to create animations in a series of panels that are displayed around the stage and work areas.

4. The TOOLS Panel runs down the left of the screen and it has four sections. The DRAWING tools, the VIEW tools, the COLOUR tools and the tool OPTIONS.

5. The DRAWING tools are the standard drawing tools that most graphics programs provide. They allow you to create and edit objects.

6. Cookie Cutting causes one object to replace part or all of another object when it is placed over the first object.

7. SELECTION TOOL is used to select or move shapes. It can also be used to modify shapes.

8. These tools are vital when creating animations. They reduce the size of files and help you organise the assets used in an animation.

Activity
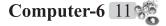**Ans**. Do yourself

9 Advanced Flash

Assessment

A.   Multiple Choice Questions :
Ans. 1. c.   2. b.   3. a.   4. c.   5. a.   6. c.

B.   Fill in the blanks :
Ans. 1. Adobe Flash provides two main ways of animating, **Tweening** and **key frame animation**.

2. The most common form of animation is **Tweening** where you set a starting point and an end point.

3. You can use the **Arrow keys** on the keyboard to nudge the symbol into place.

4. **Shape Tweening** operates on objects drawn using tools such as the rectangle, oval or pencil tools.

5. If you set 12 frames in the **Timeline** panel the animation will run for about 1 second.

C.   True and False :
Ans. 1. T   2. T   3. F   4. T   5. F

D.   Answer the following questions :
Ans. 1. Two ways of animating in flash is called Tween animation.

2. Tweening is where you set a starting point and an end point of an object in an animation. To animate an object frames need to be inserted in the timeline panel, that is known as key frame.

3. Motion Tweening involves moving objects from a starting point to an end point. You can motion tween objects, text, drawings, etc. They must be grouped or converted to a symbol.
4. Timeling panel is a place where object which is to be animated is kept in frames.
5. Shape tweening allows you to animate one shape into another. It operates on objects drawn using tools such as the rectangle, oval or pencil tools. It does not work with grouped objects or symbols.
6. There are times when you want an object to stay fixed at one end and move around that point.
7. Layers reduce the size of file and help you organise the assets used in an animation.

Activity
Ans. Do yourself

10 Introduction to The Internet

Assessment

A. **Multiple Choice Questions :**
Ans. 1. b.   2. b.   3. c.   4. b.
       5. c.   6. d.   7. d.

B. **Fill in the blanks :**
Ans. 1. The **Internet** is a worldwide network of computers.
       2. **Web pages** can include text, pictures, video and sound.
       3. The two primary methods of accessing the Internet are : **network connection** and **dial up connection**.
       4. If a webpage does not load correctly **refresh button** tells the browser to try to load the page again.
       5. The shortcuts are called **book marks** in Mozilla Firefox.
       6. **Hackers** can link up their own computer to networks, and open private files.
       7. **Domain Name** help in identify the type of business or organisation that the web site is owned by and the country.

C. **True and False :**
Ans. 1. F   2. T   3. F   4. T
       5. T   6. T   7. F

D. **Answer the following questions :**
Ans. 1. Internet is a world wide network of computers. It works with the help of modem, telephone line and appropriate software.
       2. **Use e-mail**
          E-mail or electronic mail is a method of using your computer to send messages to other Internet users.
          You can contact people, no matter where they are in the world, in a few minutes.
       3. Many people use the Internet to chat online. You can type a message onto your screen, which is then seen by other users. You can use your computer

to talk on the telephone and even take part in a videoconference, where you talk to a person and see them at the same time.

4. Internet Service Provider (ISP) to connect to the Internet.
   An ISP will provide:
   - software for connecting to the Internet.
   - a telephone helpline (technical support)
   - an e-mail address for you to send and receive e-mail.

5. The two primary methods of accessing the Internet are network connection and Dial-up connection.

6. To access the World Wide Web, you need to use a web browser. A browser is a software program that allows users to access and navigate the World Wide Web. The two most frequently used browsers are Microsoft Internet Explorer and Mozilla Firefox. Both browsers are quite similar.

7. You can find web pages by doing a keyword search in a search engine. The most popular search engine is Google.
   A keyword is a word which sums up the subject of a page. For example, you might want to search for information about cars.

8. **Disadvantages of using the Internet**
   You should be cautious about the following when using the Internet.
   Personal Information : If you use the Internet, other people can access your personal information such as your name, address, etc. If you use a credit card to shop online, then your credit card information may be stolen.
   Offensive Material : This is a very serious issue concerning the Internet, especially when it comes to young children. There are thousands of adult sites on the Internet that can be easily found and this need to be considered when letting children use the Internet.
   Spamming : You may receive spam when using e-mail. Spam is unsolicited E-mail in bulk, which serve no purpose and unnecessarily slow down the entire Internet.
   Viruses and Spyware : Your computer can get malicious software called viruses and spyware, without your knowing about it, if you copy files from an infected computer or open an infected email attachment, viruses and spyware can spread rapidly over the Internet. Make sure that you have anti-virus and anti-spyware software installed on your computer and keep it up-to-date.
   Hackers : Hackers are people who access a computer system without permission. They can link up their own computer to networks, and open private files. By reading or changing the information in these files, they may be able to misuse your personal information. If your computer is connected to a network, or always connected to the Internet using a broadband connection, remember that other people may be able to access your files. Make sure you have protection known as a Firewall.

Activity
Ans. Do yourself