An Introduction to Computer System

Solutions

Summative Assessment

Multiple-Choice Questions (MCQs)

1. Which of the following is not a feature of a computer system?
   a. Fast performance
   b. Executing logical operations
   c. Decision taking capability
   d. Never get tired

Ans. c

2. Which of the following defines a computer system more accurately?
   a. Hardware
   b. Software
   c. Hardware, software, and data
   d. Data, information, hardware and software

Ans. d

3. .... is a special type of pen used to write text and select options on the LCD screen.
   a. Stylus   b. PDA
   c. Embedded computer   d. All of the above

Ans. a

4. Which of the following best defines 'data'?
   a. The output coming from the computer system
   b. Arranging processed data
   c. Report printed by the computer system
   d. Raw facts and figures

Ans. d

5. Which of the following activities are performed by a computer system for a train reservation system?
   a. Checking seat availability
   b. Displaying arrival and departure time
   c. Making reservation and printing tickets
   d. All of the above

Ans. d

6. Which of the following computer systems can be used while commuting by a train, bus, or plane?
   a. Mainframe Computer   b. Personal computer
   c. Supercomputer   d. Laptop

Ans. d

7. Which of the following computer systems is used in appliances, such as washing machines and cars?
   a. PDA   b. Laptop
   c. Embedded computer   d. Mainframe

Ans. c

Very Short Answer Questions

8. What do you mean by computer hardware?

Ans. Computer hardware refers to the physical parts of a computer, such as keyboard, mouse and monitor.

9. Specify an example of computer hardware and software.

Ans. Keyboard is an example of computer hardware and operating system is an example of computer software.

10. Keyboard is an optional component of computer. (True or False).

Ans. False

11. Give an example of data.

Ans. Example of data is 15.

12. What is the combination of IT and biotechnology known as?

Ans. The combination of IT and biotechnology is known as bio-informatics.

Short Answer Questions

13. What do you understand by a computer and how is it useful for you?

Ans. A computer is an electronic device which is used to perform a variety of operations on the basis of a set of instructions called program. Computer is considered as a useful device as it performs a wide variety of tasks within seconds.

14. List down the strengths and weaknesses of a computer system.

Ans. The following are the strengths of a computer system:
   ❍ Speed

- ❍ Storage capacity
- ❍ Reliability
- ❍ Accuracy
- ❍ Consistency
- ❍ Versatility

The following are the weaknesses of a computer system:
- ❍ No Power to Make Decisions
- ❍ No IQ
- ❍ No Heuristics

15. What are the various applications of computers in the field of entertainment?

Ans. Computers allow you to create music by using Musical Instrument Digital Interface (MIDI). Computers are also used for brightening or dimming the stage or studio lights. Almost all movies made today use computerized special effects.

16. What are the four basic constituents of a computer system?

Ans. The four basic constituents of a computer system are: input unit, processing unit, output unit, and storage unit.

17. What do you mean by workstations?

Ans. Workstations are computer systems that have greater memory and more extensive mathematical abilities than an ordinary computer. Workstations can be connected to other workstations or personal computers to exchange data.

18. Define technological convergence.

Ans. Technological convergence denotes merging of two or more existing technologies to invent a completely new technology with multiple benefits.

19. List the technologies that have emerged as a result of convergence of two or more technologies.

Ans. The following technologies have emerged as a result of convergence of two or more technologies:
- ❍ ICT
- ❍ Bio-informatics
- ❍ Material Convergence
- ❍ Intelligent Bioscience

Long Answer Questions

20. Do you think a computer system can be applied in business and medicine? Why?

Ans. Yes, a computer system can be applied in business and medicine in the following manner:
- ❍ **Computer Applications in Business:** Computers have become a necessity for performing various kinds of business activities, such as billing, budgeting, accounting, and reporting. For example, whenever someone want to pay bill in a shopping mall, he/she is benefited with the power and speed of computers.
- ❍ **Computer Applications in Medicine:** The computer also plays a vital role in the field of medicine. For instance, it handles the activities of monitoring patients, diagnosing diseases, and so on. There are also many computerized equipment and devices, such as pacemaker that is used to fix the heart-related problems of a patient. Medical students may also practice surgical procedures by using virtual labs.

21. In what ways a computer system can be applied in education and research?

Ans. Computers can be used in classrooms, libraries, and laboratories for preparing reports, displaying information, developing projects, and providing interactive learning aids. It is also possible to create virtual classrooms through computers if the instructor and students are situated in two separate geographical regions and read magazines and journals online.

Moreover, computers can also be used in research as various research scholars and scientists utilize computers to experiment, design, and develop projects. A large number of sophisticated instruments and devices are used in all facets of research and development activities. For example, nuclear reactions in large nuclear reactors are controlled by computers. Computer aided devices can forecast the weather and most natural disasters, such as tsunami and earthquake.

22. How computer systems can be applied in communications?

Ans. Computers provide a wide range of communication technologies, such as e-mail, chat, Web conferencing, and Voice over Internet Protocol (VoIP). E-mail helps users send textual messages and other types of data to their friends and relatives who may be living far apart. Video conferencing or Web conferencing is an effective medium of interaction between two or more persons simultaneously. Chatting provides text-based interaction between two or more persons. VoIP allows sending voice calls using a broadband or a wireless connection instead of a telephone line. The voice call saves the user from typing a long offline message.

23. Do you think computer systems can be applied in the field of manufacturing? Why?

Ans. Yes, a computer system can be applied in the field of manufacturing. It is a challenge to regulate and control a real time manufacturing process, such as preparation and packaging of soft drinks. The use of computer system controls the entire production process in the manufacturing process. In manufacturing, all the activities are automated and controlled by computers. Manufacturing activities, such as putting the cork on the bottle, are accomplished by real-time computer software because it requires high precision and accuracy. Different computer applications may be used to control the tools and equipments in the manufacturing of the products.

24. How computer systems are implemented in governance and defence?

Ans. Computers are used by the government to maintain or deal with bulk of data, such as maintaining census details, measuring per capital income, reserving tickets, paying bills and taxes, etc. The use of computer in government offices also include the e-mail functions, distributing the payments, keeping the records and for direct-mailing the promotions.

Computers are used by the defence staff to perform many important tasks, such as evaluating the trajectories of missiles and broadcasting information. For example, Distributed Common Ground

System-Army (DCGS-A) is an application developed for Army specifications by a consortium of defence contractors. It is a United States Army's primary system for posting and processing the information.

25. What are the basic constituents of a computer? Name them and provide a definition for each.

Ans. The basic constituents of a computer are as follows:

- ❍ **System Unit:** Consists of various smaller components, such as Motherboard, Hard disk, Random Access Memory (RAM), Central Processing Unit (CPU) and Sound card.

- ❍ **Monitor:** Displays the output of a computer. It is television-like equipment which can be Cathode Ray Tube (CRT), Liquid Crystal Display (LCD) and Light Emitting Diode (LED).

- ❍ **Mouse:** Refers to a pointing device that perfectly fits in the user's palm and allows him/her to perform certain activities on screen, such as clicking a button and placing the cursor at a specific location.

- ❍ **Keyboard:** Refers to a device that contains keys to feed information into a computer.

26. Computers are unable to take decisions on their own; instead, they depend upon the input being provided by humans. Give explanation in support of your answer.

Ans. Computers are machines and, therefore, we need to provide input to make them work. Although computers provide accurate results, yet they have some limitations as compared to human beings.

One of its limitations is that they do not have self-intelligence and therefore no power to make the decisions on their own. They are helpful in taking the decisions but they cannot take their decisions on their own as they do not possess the key elements required for decision making. These essentials include IQ, knowledge, intelligence, wisdom, ability to judge, etc. They need to be informed time to time regarding the tasks to be performed.

Word Processing Tool — OpenOffice Writer-I

Solutions

Summative Assessment

Multiple-Choice Questions (MCQs)

1. A .... is a computer application that is used to create, edit, and organize a document.
   a. Word processor   **b.** Spreadsheet
   c. Presentation   **d.** Database

Ans.   a

2. Which one is not a component of the Writer window?
   a. Menu bar   **b.** Document area
   c. Status bar   **d.** Applications menu

Ans.   d

3. What is the name given to the area in Writer where you type text?
   a. Status bar   **b.** Writer document
   c. Document area   **d.** None of the above

Ans.   c

4. Which one is not a non-printing character?
   a. Paragraph mark   **b.** Space mark
   c. Blank line   **d.** Tab mark

Ans.   c

5. Which of the following shortcut keys selects the line from the cursor position to end of the line?
   a. Ctrl+Home   **b.** Shift+Home
   c. Shift+End   **d.** Ctrl+End

Ans.   c

Very Short Answer Questions

6. In how many ways can you navigate in a document in Writer?

Ans.   We can navigate in a document in two ways.

7. What happens when you press the Ctrl+Home keys in your document?

Ans.   The Ctrl+Home key combination lands the cursor at the beginning of your document or the first page.

8. Which option will you use to print the text of your document page width-wise?

Ans.   The Landscape option allows you to print the text of your document page width-wise.

9. What is line spacing? How many types of line spacing options are available in Writer?

Ans.   Line spacing refers to the space between two or more selected lines in a document. Writer provides seven types of line spacing.

Short Answer Questions

10. Write two advantages of the spelling and grammar feature of a word processor.

Ans.   The spelling and grammar feature has the following two advantages:
   ❍ Enables you to check spelling mistakes in a document
   ❍ Provides possible alternatives for incorrect words

11. Briefly explain paragraph indentation in Writer.

Ans.   The paragraph indent specifies the distance of a paragraph from the page margins.

12. Define the First line and Hanging indent in the Writer.

Ans.
   ❍ **First Line Indent:** Here, you need to provide an indent value in the First line spin box in the Indent section. For the positive indent, you need to provide a positive value and for the negative indent, you need to provide a negative value in the spin box.
   ❍ **Hanging Indent:** Keeps the text a little inward from the first line. The hanging indent is generally used for bulleted terms, number lists, and glossary terms.

13. How is the insert mode different from the overtype mode in Writer?

Ans.   If your document is in the INSRT mode, then when you add new text in a line of your document, the old text will be shifted to the right side of the new text. On the other hand, if your document is in the OVER mode, then the text that you type in a line of your document overtypes or replaces the previous text.

14. Give two advantages of a word processor over typewriters.

Ans.   A word processor has the following two advantages over typewriters:
   ❍ The speed of typing in the word processor is very fast as compared to any conventional typewriter.

○ The word processor allows you to perform all types of editing tasks in a text document, such as insertion, deletion, and modification.

Long Answer Questions

15. How is horizontal alignment different from vertical alignment?

Ans. In horizontal alignment, text is aligned with respect to the left and right margins of the page. The horizontal alignment is of four types namely left alignment, right alignment, center alignment, and justified alignment. On the other hand, in vertical alignment, text is aligned with respect to the top and bottom margins of the page. In vertical alignment, you can align the text in four ways, such as top aligned, bottom-aligned, middle-aligned, and justified.

16. Define the following features of a word processor:
○ Text attributes
○ Word wrapping
○ Spell Check
○ Text alignment
○ Mail Merge
○ Find & Replace

Ans.

○ **Text attributes:** Enables you to modify the appearance of fonts as per requirement. The text attributes (such as bold, italic, all caps, and underline) help us highlight certain things in our documents.

○ **Word wrapping:** Refers to a special feature of the Writer that arranges the words according to set margins. It means, if a word does not fit in a line, it automatically comes to the beginning of the next line. It saves you from pressing the ENTER key to go to the next line.

○ **Spell Check:** Enables you to check spelling mistakes in a document. It also provides possible alternatives for incorrect words. Some word processors also check grammatical mistakes.

○ **Text alignment:** Enables you to set the spacing of the lines and paragraphs from the margins. While adding text in a document, you will find that each line of the text appears uniformly at an equal distance from the left margin of the page by default. Such a uniform setting of the text with respect to page margins is called alignment. The following two things affect the text alignment: Left and right margins and indentation of paragraphs, if provided. The text alignment is of two types: Horizontal alignment and Vertical alignment.

○ **Mail Merge:** Enables you to type or print more than one document with similar text. For example, the invitation letters where you need to change only the name and address of the recipients and rest of the information will be same for all.

○ **Find and Replace:** Enables you to find and replace a particular word in a document. Even if the word the user is looking for has been used hundreds of times in a document, it can be found easily and replaced in one go.