Sample Question Paper - 1
Class- IX Session- 2021-22
TERM 2
Subject- Computer Science

Time Allowed: 2 hour   **Maximum Marks: 25**

General Instructions :

1. *The Question Paper contains three sections A, B and C. Each section is compulsory.*
2. *Section A has 4 questions of short answer type. Each question is of 2 marks. Internal choice is provided in 1 question.*
3. *Section B has 3 questions of Long Answer Type-I (LA-I). Each question is of 3 marks. Internal choice is provided in 1 question.*
4. *Section C has 2 questions of Long Answer Type-II (LA-II). Each question is of 4 marks.*

Section – A   [8 marks]

This section has 4 questions of short answer type. Each question is of 2 marks. Internal choice is provided in 1 question.

1. Differentiate between data and information.
2. Define Operating System? Give any three examples of operating system.

OR

Explain IPO cycle, with block diagram.

3. Define memory in computer and name the types of memory.
4. Explain the function of 'Autofill'?

Section – B   [9 marks]

This section has 3 questions of Long Answer Type-I (LA-I). Each question is of 3 marks. Internal choice is provided in 1 question.

5. Sunanda is a video editor and performs video editing in an advertising agency. The files she stores are usually of huge sizes. The company plans for an upgradation and require to keep backup. Suggest Sunanda an Optical Disk that will help her in keeping backup with reasons. Mention some of the features of the disk you suggested.
6. Name the basic units of the computer? Mention the parts of CPU and their functions.
7. Enlist some of the functions of an Operating System.

OR

Define software. Describe the various categories of software.

This section has 2 questions of Long Answer Type-II (LA-II). Each question is of 4 marks. Question-8 is of case-based type.

8. Read the case study given below and attempt any 4 sub-questions (out of 5). Each sub-question carries 1 mark.

Computer software is so called in contrast to computer hardware, which encompasses the physical interconnections and devices required to store and execute (or run) the software. In computers, software is loaded into RAM and executed in the central processing unit. At the lowest level, software consists of a machine language specific to an individual processor. A machine language consists of groups of binary values signifying processor instructions (object code), which change the state of the computer from its preceding state. Software is an ordered sequence of instructions for changing the state of the computer hardware in a particular sequence. It is usually written in high-level programming languages that are easier and more efficient for humans to use (closer to natural language) than machine language. High-level languages are compiled or interpreted into machine language object code. Software may also be written in an assembly language, essentially, a mnemonic representation of a machine language using a natural language alphabet. Assembly language must be assembled into object code via an assembler.

  (i) What does RAM stand for?

 (ii) Where does the software loaded and executed?

(iii) Assembly language must be assembled into object code via an ....

 (iv) .... is an ordered sequence of instructions for changing the state of the computer hardware in a particular sequence.

  (v) What is machine language?

9. Write the steps for using rehearse timing feature of PowerPoint.

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Solution

Section – A
[8 marks]

1.

Data	Information
Data is unprocessed raw facts and figures.	Information is processed and meaningful form of data.
Data is a single unit that does not carry any specific meaning.	Information is a group of data that has a logical meaning.

Commonly Made Error
- Mostly students get confused when only definition of Data is asked in question paper. They usually write the definition of information in place of data.

Answering Tip
- Read the question carefully before writing answer.

2. An operating system is a system software which acts as an interface between a user and the hardware. It manages computer hardware and controls the execution of application programs. Examples of operating system are Windows, Unix and Linux.

OR

The basic principle on which the computer works is known as IPO cycle. The input is the data which is feed by the user for processing, supported by storage and finally the output is given in the form of information.
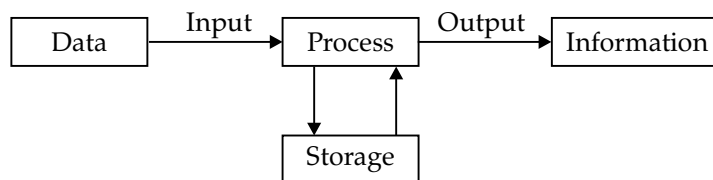
IPO Cycle

3. Similar to human brain a computer memory is used to store data and instructions. It is the storage space in computer, where data is to be processed and instructions required for processing are stored. A computer memory is of two types:
- **(i)** Primary memory, also known as main memory or internal memory
- **(ii)** Secondary memory, also called auxiliary memory or external memory.

4. Autofill is a feature in Excel, that automatically fills certain boxes with data that follows a pattern or are based on information the user has entered elsewhere.

<div align="center">

Section – B

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<div align="right">

[9 marks]

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5. She can use DVD to keep the backup. DVD stands for Digital Versatile Disc. A DVD is a type of optical media used for storing digital data. It is the same size as a CD but has a larger storage capacity.. Some of the features of DVD are enlisted below:

(i) Large storage capacity, e.g. 4.7 to 9 Gb

(ii) Excellent sound and picture quality, so best option to store videos and audios

(iii) Relatively cheap as they are mass-produced

**(iv)** Information can be stored on both sides of DVD unlike CD.

6. The computer system is composed of three basic units:

(i) Input unit

(ii) Central Processing Unit (CPU)

(iii) Output Unit

The CPU or Central Processing Unit comprises of three sub units:

(i) Control Unit – This unit coordinates the operation of the processor by telling the computer's memory, ALU and input and output devices how to respond to a program's instructions.

(ii) Arithmetic and Logic Unit (ALU) – This unit executes most of the arithmetic and logical operations of a computer.

(iii) Memory Unit - The memory unit is a component of a computer system. It is used to store data, instructions and information. It is also known as a primary or internal memory.

The following block diagram shows the parts of computer:
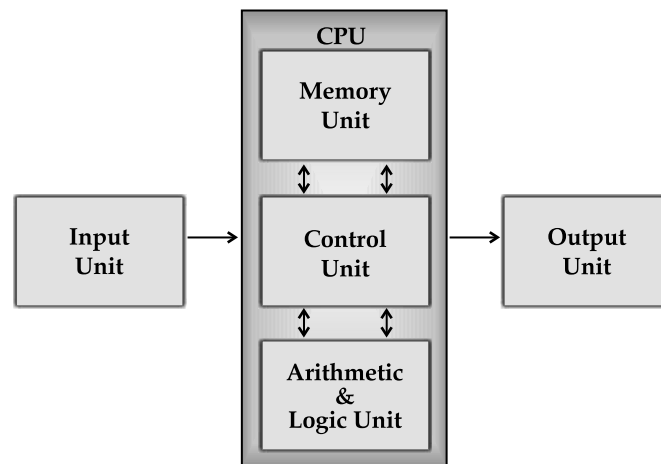
Commonly Made Error
• Students do not make diagram or label it properly.

Answering Tip
• Read the question carefully and label the block diagram properly.

7. An Operating System acts as interface between user and the hardware. Some of its major functions are as follows:

(i) Allocates and de-allocates memory to different processes.

(ii) Keeps track on processor and status of processes.

(iii) Manages input and output devices.

(iv) Helps in storing files and their deletion.

(v) Takes care of the activities of the computer system during multiprocessing.
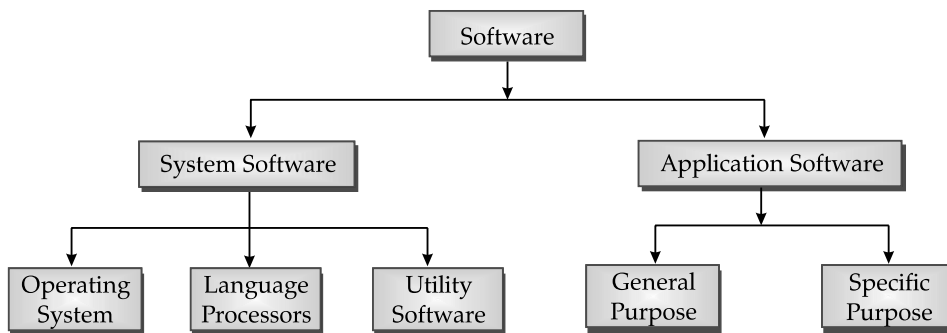
A software is a set of programs that controls the operations of a computer system and makes the hardware functional.

Software is broadly categorized into two categories:

(i) System Software: The system software refers to the collection of programs which are designed to operate and control the computer itself. It serves as an interface between the hardware and the users. System software can be further divided into following categories:

(a) Operating system

(b) Language processors

(c) Utility software

(ii) Application Software: An application is any program, or group of programs, that is designed to perform specific functions for users. It includes database programs, word processors, Web browsers and spreadsheets etc. The application software is further classified as:

(a) General Purpose Application Software

(b) Specific purpose Application Software.

Section – C

[8 marks]

8. (i) Random Access Memory.

(ii) Software is loaded into RAM and executed in the Central Processing Unit.

(iii) Assembler.

(iv) Software.

(v) Machine language is a language of 0's and 1's.

9. For using this outstanding feature, do the following:

(i) On the slide show tab, in the set up group, click rehearse timing. The rehearsal toolbar will appear and the slide time box begins timing the presentation.

(ii) While you set the time in your presentation, do one more of the following on rehearsal toolbar.

To more to the next slide, click next

To temporarily stop recording the time, click pause.

To restart recording the time after pausing. Click pause.

To restart recording the time for the current slide, click repeat.

(iii) After you set the time for the last slide, a message box displays the total time for the presentation and prompts you to do one of the following: To keep the recorded slide timing, click "Yes".

OR

To discard the recorded slide timing, click "No". Slide sorter view will appear and display the time of each slide in your presentation.

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