

Instruction: Attempt any Five Questions. All questions carry equal marks. Extra Attempt of any Question will not be considered.

Question No. 1

Differentiate Analog computers with Digital Computer.

Question No. 2

Explain the basic architecture of computer with the help of diagram.

Question No. 3

What are different output devices? Discuss in detail.

Question No. 4

Discuss important features of MS-Word with examples.

Question No. 5

Define software. Discuss different system software with examples.

Question No. 6

Define network. Explain network topologies with the help of diagram.

Question No. 7

Explain three levels of data processing with relevant examples.

Question No. 8

Write comprehensive note on followings.

- a) Database Server
- b) Desktop properties

See Next page for Guidelines/Hints for each question

Paksights Guideline/Hints for each question

Q1: Differentiate Analog Computers with Digital Computers

- **Introduction:** Define both analog and digital computers.
 - **Key Differences** (Use a table format for clarity):
 1. **Processing Type** – Analog processes continuous data; digital processes discrete data.
 2. **Examples** – Analog (thermometers, speedometers), Digital (laptops, calculators).
 3. **Speed & Accuracy** – Digital is more accurate; analog is real-time.
 - **Conclusion:** Importance of both in different industries.
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Q2: Basic Architecture of a Computer (With Diagram)

- **Introduction:** Define computer architecture as the structure of a computer system.
 - **Main Components** (Explain each with a labeled diagram):
 1. **Input Unit** – Keyboard, mouse.
 2. **CPU** – ALU, CU, registers.
 3. **Memory Unit** – RAM, ROM.
 4. **Output Unit** – Monitor, printer.
 - **Conclusion:** How components work together for computing tasks.
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Q3: Different Output Devices (Discuss in Detail)

- **Introduction:** Define output devices as hardware that displays results.
 - **Types of Output Devices** (Explain each with examples):
 1. **Visual Output** – Monitor (LED, LCD).
 2. **Printed Output** – Printer (Laser, Inkjet).
 3. **Audio Output** – Speakers, headphones.
 4. **Specialized Output** – Braille displays for visually impaired users.
 - **Conclusion:** Importance of output devices in different fields.
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Q4: Important Features of MS Word (With Examples)

- **Introduction:** Define MS Word as a word processing software.

- **Key Features** (Explain each with examples):
 1. **Text Formatting** – Font styles, colors.
 2. **Tables & Graphics** – Adding charts, images.
 3. **Spell & Grammar Check** – Auto-correction tools.
 4. **Mail Merge** – Automates sending bulk letters.
 5. **Collaboration Tools** – Comments, track changes.
 - **Conclusion:** How MS Word improves productivity in business and education.
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Q5: Define Software & Discuss Different System Software (With Examples)

- **Definition of Software:** Programs that run a computer.
 - **Types of System Software** (Explain each with examples):
 1. **Operating System (OS)** – Windows, Linux.
 2. **Utility Software** – Antivirus, Disk Cleanup.
 3. **Device Drivers** – Printer drivers, Graphics drivers.
 4. **Firmware** – Embedded software in hardware.
 - **Conclusion:** Role of system software in smooth computer operations.
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Q6: Define Network & Explain Network Topologies (With Diagram)

- **Definition of Network:** Interconnected devices for data sharing.
 - **Types of Network Topologies** (Explain each with a diagram):
 1. **Bus Topology** – Single cable, easy setup.
 2. **Star Topology** – Central hub, high reliability.
 3. **Ring Topology** – Data flows in one direction.
 4. **Mesh Topology** – Every device connected, very secure.
 - **Conclusion:** Importance of choosing the right topology for efficiency.
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Q7: Three Levels of Data Processing (With Examples)

- **Introduction:** Define data processing as converting raw data into useful information.
- **Three Levels of Data Processing** (Explain each with an example):
 1. **Manual Processing** – Paper-based records.
 2. **Mechanical Processing** – Calculators, typewriters.

3. **Electronic Processing** – Computers, databases.

- **Conclusion:** Why electronic processing is widely used in business.

Q8: Comprehensive Note on (a) Database Server & (b) Desktop Properties

(a) Database Server

- **Definition:** A server that stores and manages databases.
- **Functions:**
 1. Centralized data storage.
 2. Provides secure access to multiple users.
 3. Examples – MySQL, Oracle, SQL Server.

(b) Desktop Properties

- **Definition:** Customizable settings on a computer desktop.
- **Key Properties:**
 1. **Wallpaper & Themes** – Visual customization.
 2. **Screen Resolution** – Adjusting display settings.
 3. **Shortcuts & Icons** – Organizing quick access items.
 4. **Taskbar & Start Menu** – Navigation tools.
- **Conclusion:** Role of database servers in data management and importance of desktop properties for user customization.

General Answering Tips:

- ✓ **Use headings & bullet points** for clarity.
- ✓ **Include labeled diagrams** where required.
- ✓ **Provide real-life examples** for better understanding.
- ✓ **Use structured formatting** for readability.

This method ensures **clear, well-organized, and high-scoring answers!** 🚀