The purpose of preventive maintenance is to proactively ensure equipment and facilities run smoothly by scheduling regular inspections, servicing, and repairs to prevent unexpected breakdowns and costly repairs, ultimately extending asset lifespan and improving efficiency.

Here's a more detailed explanation:

Proactive Approach:

Preventive maintenance is a proactive strategy, meaning it focuses on preventing problems before they occur, rather than reacting to them after they arise.

Benefits:

- Reduced Downtime: By identifying and addressing potential issues early, preventive maintenance minimizes unplanned downtime, which can lead to significant financial losses and operational disruptions.
- Extended Asset Lifespan: Regular maintenance and upkeep can significantly extend the lifespan of equipment and facilities, reducing the need for costly replacements.
- Improved Efficiency: Well-maintained equipment and facilities operate more efficiently, leading to increased productivity and reduced energy consumption.
- Lower Maintenance Costs: While preventive maintenance requires initial investment, it often leads to lower overall maintenance costs in the long run by preventing major repairs and replacements.
- Enhanced Safety: Regular inspections and maintenance can help identify and address potential safety hazards, creating a safer working environment.

• Examples of Preventive Maintenance Activities:

- Regular Inspections: Conducting routine visual inspections to identify potential problems.
- o **Lubrication:** Applying lubricants to moving parts to reduce friction and wear.
- Cleaning: Keeping equipment and facilities clean to prevent corrosion and other damage.
- Adjustments: Making necessary adjustments to equipment settings to ensure optimal performance.
- Replacement: Replacing worn-out or damaged parts before they cause complete failure.

Importance:

Preventive maintenance is crucial for organizations of all sizes, as it helps to ensure the reliability, efficiency, and safety of their operations.