

CLASS 22

Limitations of Replacement of Items with Increasing Maintenance Costs and Changing Value of Money:

- **High Initial Investment** – Buying new items often requires large upfront costs, which can strain financial resources or limit cash flow for other operations.
- **Depreciation Loss** – Selling or scrapping old items may recover less than their book value, resulting in financial loss.
- **Uncertain Lifespan Predictions** – It's difficult to predict exactly when an item will fail, which can lead to suboptimal replacement timing.
- **Complex Analysis Required** – Optimal replacement decisions involve detailed cost calculations, inflation adjustments, and maintenance trends, which can be technically challenging.
- **Potential Underutilization** – Replacing items too early wastes their remaining useful life, reducing return on investment.
- **Resistance to Change** – Employees or managers may be hesitant to switch to new equipment due to habit, training requirements, or fear of disruption.
- **Market Fluctuations** – Prices of new items, spare parts, or inflation may change unexpectedly, affecting the economic benefit of replacement.
- **Technological Obsolescence Risk** – Even new items can become outdated quickly if technology evolves rapidly, requiring further replacements sooner.
- **Disposal Challenges** – Old equipment may require special disposal methods due to environmental regulations, hazardous materials, or logistical issues.
- **Short-Term Disruption** – Replacing items can temporarily halt operations, require system adjustments, or necessitate employee training.