**ENERGY MANAGEMENT**

1. Which of the following are common issues associated with conventional sources of energy?
   1. Toxic waste
   2. Greenhouse gases
   3. Depletion of natural resources
   4. All of the above
2. Using conventional source of energy is causing accelerated global warming. State whether true or false.
   1. True
   2. False
3. What is one of the main energy related problems plaguing countries in Asia?
   1. Abundance of energy
   2. Cheap renewable energy
   3. Frequent power outages
   4. None of the above
4. How energy can be saved for lighting by switching to LED bulbs from incandescent bulbs?
   1. 10%
   2. 99%
   3. 80%
   4. 33%
5. According to the European commission, what is the energy savings potential of the transport sector?
   1. 19%
   2. 26%
   3. 89%
   4. None of the above
6. Energy prices are directly linked to the rise and fall of fuel prices like petrol, diesel and Autogas. State whether true or false.
   1. True
   2. False
7. Which of the following is a great way to stabilize the price of their energy?
   1. Relying only on fossil fuels
   2. Discarding all machinery
   3. Diversifying sources of energy
   4. None of the above
8. Why are small businesses not keen on adopting energy efficient measures?
   1. Poor long-term planning
   2. Lack of financial and human resources
   3. Lack of awareness
   4. All of the above
9. Saving energy helps in reducing operating costs and increasing energy security of an SME. State whether true or false.
   1. True
   2. False
10. Which of the following are advantages of saving energy?
    1. Improved equipment reliability
    2. Improved environmental safety
    3. Increased dependence on fossil fuels
    4. All of the above
11. What should be the first step during the implementation of an energy efficiency prgramme?
    1. Benchmark consumption
    2. Record load profile
    3. Collect data
    4. None of the above
12. The final step of any energy efficiency plan should be to consider all possible improvement options. State whether true or false.
    1. True
    2. False
13. Weekly energy consumption and cost data should be collected for each type of energy source. State whether true or false.
    1. True
    2. False
14. Which additional details should also be collected to correctly assess electricity bills?
    1. Peak loads
    2. Power factor
    3. Hydraulic loads
    4. All of the above
15. A site-side energy audit should be conducted to catalog every piece of equipment based on their energy usage. State whether true or false.
    1. True
    2. False
16. Which key metric can help efficiently manage the energy usage of a manufacturing unit?
    1. Total liquid discharge
    2. Average solid waste discharge
    3. Load profile
    4. None of the above
17. Accurate prediction of demand can help reduce energy usage spikes in the factory. State whether true or false.
    1. True
    2. False
18. Where in the manufacturing unit can we bring about the largest energy reduction gains?
    1. Waste disposal
    2. Raw material procurement
    3. Manufacturing processes
    4. Sales
19. Which of the following can help reduce energy consumption in an office?
    1. Turning off appliances after work
    2. Servicing air-conditioners regularly
20. How much energy can we save by increasing the air-conditioning target temperature by one degree Celsius?
    1. 3%
    2. 19%
    3. 6%
    4. 23%
21. Which of the following are ways to reduce energy consumption in the cafeteria?
    1. Using copper bottom vessels
    2. Cleaning and maintaining vessels
    3. Matching vessels size to burner size
    4. All of the above
22. Why do utilities go overlooked when it comes to checking for energy leakages?
    1. They are easy to monitor
    2. Simple architecture
    3. They require site-wide audits
    4. None of the above
23. A higher supply voltage can increase bulb life by 10%. State whether true or false.
    1. True
    2. False
24. Which of the following are easy methods to reduce energy use for lighting?
    1. Painting walls and ceilings white
    2. Switch off unnecessary lights
    3. Replace CFLs with LED bulbs
    4. All of the above
25. What happens with every 10-degree Celsius rise in operating temperature of motors?
    1. Rated life doubles
    2. Rated life halves
    3. Rated life remains unchanged
    4. None of the above
26. How much input power can ‘balanced supply voltage’ help reduce?
    1. 2%
    2. 3-5%
    3. 22-24%
    4. None of the above
27. How to save energy used by air conditioning?
    1. Using inverter Acs
    2. Regular servicing
    3. Keeping doors open
    4. All of the above
28. Optimising combustion parameters within furnace can lead to a 5-10% reduction in fuel consumption. State whether true or false.
    1. True
    2. False
29. What is the amount of energy reduction that can be achieved by using all-electric machines for injection moulding?
    1. 10%
    2. 15%
    3. 30-35%
    4. 66-70%
30. Solar drying in open spaces can be effectively used to reduce energy usage during painting processes. State whether true or false.
    1. True
    2. False

For the above questions, we have designed two formats which are as follows:

Type 1: Multiple Choice Questions or MCQs

* The question will have four possible answers to choose from
* There maybe just one, multiple or no correct answers for these questions

**Sample MCQ:**

**Q1:** Tell us which of the following is a benefit of good inventory management?

* Maintain optimum inventory levels (correct)
* Save time and energy (correct)
* Decrease efficiency and productivity (incorrect)
* Improve accuracy of the accuracy of inventory orders (correct)

**Q1:** What is the full form of DOL in manufacturing?

* Double On Time (incorrect)
* Date On Tag (incorrect)
* Direct Online (correct)
* None of the above (incorrect)

**Sample True or False:**

**Q1:** Two bin system in manufacturing leads to over stocking of raw material. True or false?

* True
* False