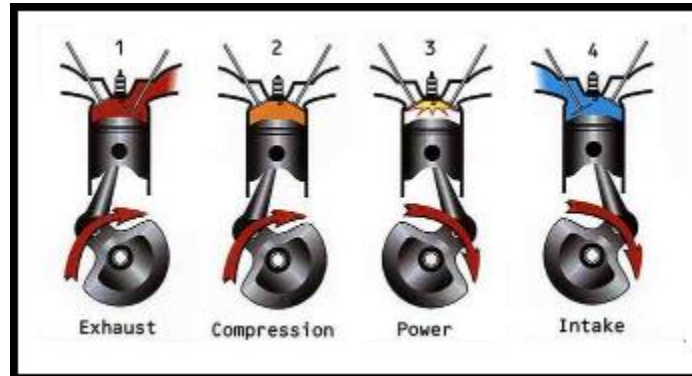


## Sample Questions

### Mechanical Engineering

1. A thread is wound around a cylindrical bottle. What would be the locus of a point on the thread, when it is unwound?
  - a. Straight line
  - b. Circle
  - c. Involute
  - d. Helix
  
2. What is the use of a reheater in the thermal power plant?
  - a. To increase the temperature of feed water.
  - b. To increase the temperature of steam before it enters the low pressure turbine.
  - c. To increase the rate of combustion of fuel during the combustion cycle.
  - d. To pre-heat the air before it enters the combustion cycle.

3. Arrange the following strokes in the order in which they occur in a 4- stroke engine.



- a. 4,2,1,3  
b. 4,3,2,1  
c. 4,2,3,1  
d. 4,3,1,2
4. What is the effect on the transmitted power when there is excess tension in the belt?
- a. Transmitted power decreases  
b. Belt efficiency increases  
c. Belt wear and tear decreases  
d. Transmitted power first increases and then decreases
5. Which of the following does not affect the drag and lift forces experienced by an object placed in a fluid stream?
- a. Temperature  
b. Pressure  
c. Velocity  
d. Viscosity

6. For which of the following purposes is an agitated film evaporator suitable?
- For concentrating viscous liquids
  - For concentrating non-sensitive liquids
  - For concentrating corrosive liquids
  - For concentrating low temperature liquids
7. Why is oil added to green molding sand?
- To improve its moldability
  - To improve the surface finish
  - To improve its permeability
  - To improve the sand binding
8. Which of the following statements is correct with reference to NC machines?
- Postprocessor is the interface between CAM systems and NC machines.
  - Paper tapes and floppy tapes are not used as data storage devices to store all the instructions for NC machine.
  - Only open loop systems are used in NC machine control system.
  - Digitizers are used as data storage devices to store all the instructions for NC machine.