

For More Questions [Click Here](#)

1. Rotary compressors are used where ____ quantities of gas are needed at relatively ____ pressure.

- a) large, high
- b) large, low
- c) small, high
- d) small, low

View Answer

Answer: b

Explanation: This is where rotary compressors are used.

2. Rotary compressor can be classified as

- a) displacement compressor
- b) steady-flow compressor
- c) both of the mentioned
- d) none of the mentioned

View Answer

Answer: c

Explanation: These are the two types of rotary compressor.

3. In steady-flow compressor, compression occurs by

- a) transfer of kinetic energy
- b) transfer of potential energy
- c) trapping air
- d) all of the mentioned

View Answer

Answer: a

Explanation: The transfer of kinetic energy occurs from a rotor.

4. In displacement compressor, compression occurs by

- a) transfer of kinetic energy
- b) transfer of potential energy
- c) trapping air
- d) all of the mentioned

View Answer

Answer: c

Explanation: Here air is compressed by trapping it in reducing space.

5. The rotary positive displacement machines are ____ and compression is ____

- a) cooled, isothermal
- b) uncooled, isothermal
- c) cooled, adiabatic
- d) uncooled, adiabatic

View Answer

Answer: d

Explanation: These are uncooled and adiabatic compression takes place.

6. The Roots blower and vane-type compressor are the types of

- a) displacement compressor
- b) steady-flow compressor
- c) both of the mentioned
- d) none of the mentioned

View Answer

Answer: a

Explanation: These are the two types of rotary positive displacement machines.

7. For a Root blower, as pressure ratio increases, efficiency _____

- a) increases
- b) decreases
- c) remains constant
- d) none of the mentioned

View Answer

Answer: b

Explanation: This can be seen by taking pressure ratios and calculating efficiencies for them.

8. The vane type compressor requires _____ the Roots blower.

- a) equal work input
- b) more work input
- c) less work input
- d) none of the mentioned

View Answer

Answer: c

Explanation: This is true for given air flow and pressure ratio.

9. The centrifugal and axial flow compressor are the types of

- a) displacement compressor
- b) steady-flow compressor
- c) both of the mentioned
- d) none of the mentioned

View Answer

Answer: b

Explanation: These are the two types of steady-flow compressors.

10. Which of the following is true for a centrifugal compressor?

- a) rotation of impeller compresses the air
- b) diffuser converts part of KE into internal energy
- c) typical pressure ratio is around 1.4 to 1
- d) all of the mentioned

View Answer

Answer: d

Explanation: This is the working of a centrifugal compressor.