## Mechanical Engineering Turbomachines Quiz Questions with Answers Pdf

1. In a gas turbine cycle, regenerator is used to

a. heat the gases coming out of combustion chamber

b., heat fuel supplied to combustion chamber

c. heat air supplied to combustion chamber

d. heat exhaust gases released from low pressure turbine

Ans; C

2. A regenerator can be used on

a. open cycle gas turbines only

b. closed cycle gas turbines only

c. both open as well as closed cycle gas turbines

d. none of the above

Ans:C

3. Gas turbine used in aircraft is of

a. open cycle type

b. closed cycle type with reheating

c. closed cycle type with reheating and regeneration and intercooling

d. open cycle type with reheating, regeneration and intercooling

Ans; A

4. In which of the following heat exchanger, heat is extracted from air?

a. Regenerator

b. Reheater

c. Intercooler

d. Combustion chamber

Ans: C

5. Which component of a gas turbine consumes maximum power?

a.starter

b. regenerator

c. compressor

d. combustion chamber

Ans: C

6. The ratio of actual velocity to the local velocity of sound is called

a. velocity ratio

b. velocity factor

c. speed ratio

d. mach number

Ans: D

7. The diverging portion of the nozzle acts as a diffuser for

a. the subsonic flow

b. the supersonic flow

c. both the subsonic as well as supersonic flow

d. none of the above

Ans:A

8. A diffuser

a. coverts kinetic energy into thermal energy

b. converts potential energy into kinetic energy

c. converts pressure energy into kinetic energy

d. converts thermal energy into kinetic energy

Ans: A

9. Thermal efficiency of a gas turbine is in the range

a. 55%

b. 45%

c. 35%

d. 20%

Ans: C

10. The continuity equation in compressible fluids is derived on the basis of

a. conservation of momentum

b. conservation of energy

c. conservation of mass

d. conservation of velocity head

Ans: C