1- According to equation of state, When the gas is kept at a constant temperature, its pressure is inversely proportional to the :

A. V volume

B. n amount of matter

C. temperature

D. none of the above

2- The temperature at which water freezes is :

A. 0 °F

B. 0 °C

C. 100 °C

D. 0 K

3- Heat Q is the :

A. Energy content of an object

B. Energy that flows from one system (A) to another (B) because of their temperature equal

C. Temperature difference

D. Energy that flows from one system (A) to another (B) because of their temperature difference

4- What is the temperature in Kelvin if the temperature in Celsius is 10°C?

A. 273.15 K

B. 10 K

C. 263.15 K

D. 283.15 K

5- For n amount of matter the total internal energy (U) is :

A. nRT

B. 3/2 nRT

C. 3nRT

D. 1/2 nRT

6- Suppose object C in thermal equilibrium with object A and with object B.

The zeroth law of thermodynamics states:

A. that A cannot be in thermal equilibrium with B

B. that C must transfer energy to both A and B

C. nothing about the relationship between A and B

D. that A is in thermal equilibrium with B

7- Heat has the same units as:

A. time

B. volume

C. work

D. temperature

8- Isobaric process is a thermodynamic process in which the .... stays constant.

A. pressure

B. work

C. volume

D. temperature

9- If a gas is heated and allowed to expand, doing 30 J of work. If 20 J of heat enters during the expansion, then the change in the internal energy of the gas is:

A. 50 J

B. -50 J

C. -10 J

D. 10 J

10- A gas at a pressure of 10 Pa is heated and is allowed to expand against a frictionless piston at constant pressure.

If the volume change is 0.5^3m, then the work is done by the gas is :

A. 20 J

B. 0.05 J

C. 5 J

D. 50 J

1- A

2- B

3- D

4- D

5- B

6- D

7- C

8- A

9- C

10- C