Home Assignment

Subject: Physics (Major)

B.Sc 2nd Semester Old Course (Arrear)

Paper: 202

Read the Instructions carefully before submission

1. **The Assignment contains 20 numbers of Multiple Choice Questions (MCQs), each having one correct answer. Out of 20 you have to attempt only 11 numbers of questions.**
2. **Please take your time and read each question carefully, because once you submit it you can't modify the answers.**
3. **Students are directed to submit the assignment by any one of the following methods**
(i) **Copy the link and past in the browser to get the assignment**
   https://forms.gle/aTVen8wcbAivj6kW9
(ii) **Send the scan copy of the assignment to the email id: majorcbcs2sem@gmail.com mentioning their Name, Roll Code and Roll No., Registration No.**
4. **Last date of submission is 08/08/2020**

Total Marks = 11

1. The branch of physics which deals with heat, work, and temperature, and their relation to energy, radiation, and properties of matter is called
    a. Thermodynamics
    b. Optics
    c. None of the above
2. If two thermodynamic systems are each in thermal equilibrium with a third one, then they are in thermal equilibrium with each other. This is known as
    a. Zeroth law of Thermodynamics
    b. First law of Thermodynamics
    c. Second of Thermodynamics
3. Energy can neither be created nor destroyed but can be converted from one form to other is inferred from
    a. Zeroth Law of Thermodynamics
    b. First law of Thermodynamics
    c. Second Law of Thermodynamics
4. The S.I unit of temperature is
    a. Kelvin
    b. Celsius

c. None of the above

5. .Which of the following variables controls the physical properties of a perfect gas
    a. pressure
    b. temperature
    c. volume
    d. all of the above

6. Which of the following law is applicable for the behavior of a perfect gas
    a. Boyle's law
    b. Charles'law
    c. Gay-Lussac law
    d. all of the above

7. An adiabatic wall is one which
    a. Prevents thermal interaction
    b. Permits thermal interaction
    c. None of the above

8. In isothermal process, the internal energy
    a. Increases
    b. Decreases
    c. Remains Constant

9. The unit of energy in S.I. units is
    a. joule
    b. watt
    c. None of the above

10. An ideal gas as compared to a real gas at very high pressure occupies
    a. more volume
    b. less volume
    c. same volume

11. General gas equation is
    a. PV=nRT
    b. PV=mRT
    c. PV = C

12. According to Dalton's law, the total pressure of the mixture of gases is equal to
    a. average of the partial pressures of all
    b. greater of the partial pressures of all
    c. sum of the partial pressures of all
    d. sum of the partial pressures of all divided by average molecular weight

13. The unit of pressure in S.I. units is
    a. pascal
    b. mm of water column
    c. dynes per square cm

14. Temperature of a gas is produced due to
    a. kinetic energy of molecules
    b. its heating value
    c. repulsion of molecules
15. According to kinetic theory of gases, the absolute zero temperature is attained when
    a. kinetic energy of the molecules is zero
    b. volume of the gas is zero
    c. pressure of the gas is zero
16. Kinetic theory of gases assumes that the collisions between the molecules are
    a. perfectly elastic
    b. perfectly inelastic
    c. partly elastic
17. The unit of power in S.I. units is
    a. watt
    b. pascal
    c. erg
18. An open system is one in which
    a. both energy and mass cross the boundaries of the system
    b. mass does not cross boundaries of the system, though energy may do so
    c. neither mass nor energy crosses the boundaries of the system
19. Entropy Change depends on
    a. Heat transfer
    b. Mass transfer
    c. Change of pressure and volume
20. The energy of molecular motion appears as
    a. Heat
    b. Surface Tension
    c. Friction