PPSC Physics Topic 3 Thermal Properties of Matter

Sr	Questions	Answers Choice
1	Which of the following is the ideal gas equation.	A. PV -n RT B. P/V = n RT C. V/P = nR/T D. PV = T/nR
2	What is the heat required in Kilo joules when the temperature of 100 g of copper is raised thgough 20 K/. Specific heat capacity of copper is 0.4 x 10-3 kg -1 k-1	A. 0.4 kj B. 0.8 kj C. 400 kj D. 800 kj
3	In order of a cyclic heat engine operating between two heat reservoirs to be as efficient as a Carnot engine. It must be.	A. A gas engine B. Adiabatic C. Reversible D. A refrigerator
4	In onw cycle of a steam engine there are how many dead centres.	A. 1 B. 2 C. 3 D. zero
5	The pressure of a goas is directly proportion to	A. Mean velocity of the molecules B. Mean square velocity of the molecules C. Root mean square velocity of the molecules D. Instantaneous velocity of the molecules
6	The change in entropy for any reversible cycle is identically	A. Infinite B. Positive C. Negative D. Zero
7	if temperature eon Celsius scale is 50 oC the temperature on Fahrenheit scale will be.	A. 102 ^oF B. 108 ^oF C. 112 ^oF D. 122 ^oF
8	The phenomenon of Brownian motion shows that	A. Molecules exist and can be seen as bright dots moving about B. Molecules moves about randomly at highs speeds C. Smoke particles behaves as molecules D. Smoke particles can be used as models of air molecues.
9	Which of the following is an example of an irreversible process.	A. Isothermal and adiabatic process B. Melting of ice C. Work done against friction D. Pettier effect
10	The product of mass and specific heat of a substance is called.	A. Latent heat B. Water equivalent C. Atomic heat D. Heat capacity
11	The term used for heat capacity per unit mass is.	A. Latent heat B. Specific heat C. Energy density D. Specific energy
12	Advantage of using gases as thermornetic substrates is taht	A. Gases have a small coefficient of expansion B. Expansion of gases is irregular C. Gases can be obtained in pure form D. Gases have a large coefficient of expansion.
13	Contrivances for converting heat into work are called.	A. Heat pumps B. Heat engines C. IC engines D. Jet engine

14	The process in which no heat enters or leaves the system is called.	A. Isdobaric B. Isochoric C. Isothermal D. Adiabatic
15	According to kinetic theory of gases one assumes that the collisions between molecules are.	A. Perfectly elastic B. Perfectly inelastic C. Partly elastic D. Partly inelastic
16	The door of an operating refrigerator in a closed room is opened after sometime the temperature of the room will be	A. Lowered B. Raised C. Unaffected D. Become zero
17	The practical efficiency of a heat engine is	A. 25% to 30.5 % B. 35% to 45% C. 30% to 45% D. 15% to 25%
18	Which of the following measures how quickly the thermometer liquid mainly because it	A. Is coloriess B. Is a bad conductor of heat C. Does not expand linearly D. Has a low boiling point
19	Temperature of a gas is related to.	A. Total K.E. of the gas molecules B. The K.E. of the centre of mass of the gas C. The P.E. of the centre of mass of the gas D. Total K.E. of the molecules w.r.t the centre of mass of gas
20	Identify the irreversible process	A. Explosion of a bomb B. Slow expansion of a gas C. Slow compression of a gas D. Slow compression of an eleastic spring