MHT CET Practice Questions 2023 (6)

1. Bob is released 90 deg from the mean position. Find T at the mean position.
2. Work done in blowing a bubble of radius r is W1. Temp is increased while blowing a radius of 2r with work W2. Find relation in W1 W2.
3. Water rises to a height h in a tube of radius r. Its mass is m. Find the mass of water in the tube of radius 2r.
4. The temperature of the sun is increased 4 times. The radiated energy is?
5. Question on Relation in KE of a gas molecule with temperature.
6. Select the correct option.(correct option=> in adiabatic process ∆U=-dW)
7. N R T P1 V given. Find P2.
8. Find the velocity of shm.
9. When the mass of 9kg is attached to the sonometer, 5 antinodes are formed. Find mass attached for 3 antinodes.
10. A charge Q is placed midway between 2 charges +q such that the system is in equilibrium. Find Q.
11. KCL and KVL are based on... (Ans: Conservation of charge and conservation of energy)
12. In the Wheatstone bridge, P Q R are connected in 3 gaps. s1 and s2 are connected in parallel in the 4th gap. Find balancing conditions.
13. 2 circular conductors are concentric with radius r1 r2. (Some condition was given). Find i1/i2.
14. ¢=π/4. R=40ohm. L in series. Find inductive reactance.
15. Question on the relation of the wavelength of photon and proton.
16. The activity of nuclei is 1000 at t=0,
17. 600 at t=8. Find activity at t=6.
18. When 2 inputs are opposite, the output is high. Which Logic gate is it? (XOR gate)