

**Bs/G Phy 4(a) (AK)**

**2 0 2 4**

( CBCS )

( 4th Semester )

**PHYSICS**

Paper No. : G Phy 4(a)

**( Thermal Physics and Statistical Mechanics )**

( PART : A—OBJECTIVE )

( Marks : 25 )

**KEY ANSWERS FOR OBJECTIVES**

SECTION—I

( Marks : 15 )

Put a Tick (✓) mark against the correct answer in the  
brackets provided : 1×15=15

1. (d) both on temperature and volume of the gas
2. (a) is zero
3. (c) both isothermal and adiabatic changes
4. (d) remains constant
5. (b) isothermal process
6. (b) heat engine

**/1067K**

( 2 )

- 7. (b)  $G = U - PV + Ts$
- 8. (c) both real and ideal gases
- 9. (c)  $TE^{-2}V$
- 10. (b) Distribution of molecular speeds in a gas
- 11. (c) ability to flow
- 12. (d)  $E \propto (T^4 - T_0^4)$
- 13. (c) Fermi-Dirac
- 14. (a) bosons
- 15. (a) maximum

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