Printing Page(s) : 1 **Paper Code :DSC-203**

Roll No.

B.Sc (PCM)-11

2st Year Examination, Academic Batch 2016-17

Physics-III (Heat and Thermodynamics)

Time : 3 Hours] *[Max. Marks : 100*

***Note**. Attempt any **five** questions. Each questions carry equal marks.*

Q.1. What do you understand by Brownian motion? Explain it from kinetic theory.

Q.2. Describe the method of liquefying hydrogen.

Q.3. What is an absolute scale of temperature? Show that this scale agrees with the ideal gas scale.

Q.4. Prove that S2-S1=(dL/Dt)-(L/T).

Q.5. What is a perfectly black body? Show how it can be realised experimentally.

Q.6. Discuss how van der Waal's equation is applicable to real gases.

Q.7. Obtain the relation between temperature of inversion and Boyle's temperature.

Q.8. Define solar constant. Explain with necessary theory how the solar constant is determined.