

D. Retarding force

(x) The SI-unit of co-efficient of viscosity is:

- A.  $Kgm^{-1}s^{-1}$  B.  $Kgm^{-1}s^{-2}$   
C.  $Kgm^{-2}s^{-1}$  D.  $Kgm^{-3}s^{-2}$

(xi) A stone of mass 16 kg is attached to a string 144 m long and is whirled in a horizontal circle. The maximum tension the string can withstand is 16 N. the maximum velocity of revolution that can be given to the stone without breaking it, will be:

- A.  $20 ms^{-1}$  B.  $16 ms^{-1}$   
C.  $14 ms^{-1}$  D.  $12 ms^{-1}$

(xii) The property of fluid by which its own molecules are attracted is said to be:

- A. Adhesion B. Cohesion  
C. Viscosity D. Surface Tension

(xiii) A simple pendulum is moved from the Earth to the Moon. How does it change the period of oscillations? (Acceleration due to gravity on moon =  $1.6 ms^{-2}$ )

- A. The period is increased by factor  $\sqrt{6}$   
B. The period is increased by factor four  
C. The period is decreased by factor  $\sqrt{6}$   
D. The period remains the same

(xiv) Which of the following conditions is best for cooking purpose?

- A. Isobaric B. Isochoric  
C. Adiabatic D. Isothermal

(xv) What would be the efficiency of a Carnot engine operating with boiling