

VINAYAK COLLEGE OF HEALTH SCIENCE  
Batishputali, Kathmandu  
Faculty: HA, LAB, DPH and CPT, First Year  
Subject: Physics

Full marks: 20

Time: 20 Minute

SECOND INTERNAL EXAMINATION 2081

NAME: ..... ROLL NO: .....

FACULTY: General Medicine  Pharmacy  Lab  Physiotherapy

Tick (✓) the Best Answer.

Multiple Choice Question

1. The dimension of Surface tension is.....

- A.  $[MLT^{-2}]$       B.  $[ML^0T^{-2}]$       C.  $[ML^2T^{-3}]$       D.  $[ML^2T^{-2}]$

2. Scalar product of two vectors is .....

- A. Vector      B. Scalar      C. Unit vector      D. Zero Vector

3. If  $\vec{A} \times \vec{B} = 0$ , what is the angle between  $\vec{A}$  and  $\vec{B}$  ?

- A. 0      B. 60      C. 90      D. 120

4. Newton's First law of motion describes the .....

- A. Energy      B. Work      C. Power      D. Inertia.

5. work done maximum if angle between force and displacement is ..

- A.  $0^\circ$       B.  $90^\circ$       C.  $45^\circ$       D.  $180^\circ$

6. A body is projected with velocity 100m/s at  $45^\circ$  then maximum height attained

- A. 500m      B. 200m      C. 2500m      D. 400m

7. An object of mass 2kg moves around a circle of radius 6m with constant speed of 6m/s then angular velocity is ..

- A. 1rad/s      B. 2rad/s      C. 3rad/s      D. 4rad/s.

8. When a bus suddenly takes a turn, the passengers are thrown outwards because of .....

- A. Centripetal force  
B. Centrifugal Force  
C. Speed of motion  
D. Acceleration of motion

9. At what angle, a body is thrown for maximum horizontal range

- A.  $30^\circ$       B.  $60^\circ$       C.  $90^\circ$       D.  $45^\circ$

10. A ball is thrown horizontally from the top of a tower, horizontal component of its velocity will

- A. Increase      B. Decrease      C. Constant      D. first increase and then decrease

11. The Energy possess by a stretched spring is ..  
A. Kinetic Energy    B. Potential Energy    C. Both A & B    D. None of above
12. Pressure exerted by liquid depends upon ...  
A. Density    B. Surface tension    C. Viscosity    D. Upthrust
13. The weight of a body at the center of the Earth is..  
A. Zero  
B. Infinite  
C. Same as on the surface of Earth  
D. None of above
14.  $40^{\circ}\text{C}$  is equal to..  
A.  $102^{\circ}\text{F}$     B.  $103^{\circ}\text{F}$     C.  $104^{\circ}\text{F}$     D.  $106^{\circ}\text{F}$
15. What happens when water at  $4^{\circ}\text{C}$  is heated further?  
A. Mass increase  
B. Mass Decreases  
C. Volume Increase  
D. Volume Decreases
16. What is value of latent heat of fusion of ice....  
A. 60 Cal/gm    B. 80 Cal/gm    C. 100 Cal/gm    D. 120 Cal/gm
17. Heat Travels from sun to Earth by...  
A. Conduction    B. Convection    C. Radiation    D. Both A & B
18. When Spherical mirror is immersed in water then Focal Length of the mirror is...  
A. Zero    B. Increased    C. Decreased    D. Constant
19. A person can't see object clearly beyond 100 cm. The power of lens to correct this vision  
A. -1D    B. -2D    C. +5D    D. -5D
20. The velocity of sound in air is ..  
A. 280 m/s    B. 300 m/s    C. 332 m/s    D. 342 m/s

