PHYSICS (Eng/Urdu) Class 9th	Paper Code	Roll No. of the Student
Time: 20 Minutes Marks: 12	● ② ③	
Multiple Choice Questions 01 Mark for each		Serial No. Of the Answer Book_____

SECTION-A

Note:

1) Attempting all MCQs is compulsory. This paper along with the OMR sheet must be returned to the superintendent after due time.
2) Fill the circle Ⓐ Ⓑ Ⓒ Ⓓ, which one is correct with blue or black ball point, in this sheet as well as in separate OMR Sheet like ●
3) If more than one circle in the OMR sheet is filled then no credit will be given to such answer.

1. The slope of displacement time graph is called _____.

Ⓐ Speed ● Velocity Ⓒ Acceleration Ⓓ Displacement

2. The symbol of the prefix used for Mega is _____.

Ⓐ Mg Ⓑ m Ⓒ G ● M

3. $250^{o}k =$ _____ C.

Ⓐ 270^{o} Ⓑ 270^{o} Ⓒ 23^{o} Ⓓ -23^{o}

4. A 1 kg mass has KE of 1 joule when its speed _____.

Ⓐ $4.4\ m.s^{-1}$ Ⓑ $1\ ms^{-1}$ Ⓒ $0.45\ ms^{-1}$ ● $1.4\ ms^{-1}$

5. 1 joule per second = _____

Ⓐ 1 Watt Ⓑ 1 Joule Ⓒ 1 Newton Ⓓ 1 Pascal

6. The contripetal acceleration is represented by an equation $a_c =$ _____.

Ⓐ vr^2 Ⓑ v/r^2 ● v^2/r Ⓓ v^2r

7. The rate of change of velocity is called _____.

Ⓐ Speed Ⓑ Distance ● Acceleration Ⓓ Displacement

8. Unit of weight is _____.

Ⓐ Meter ● Newton Ⓒ Kilogram Ⓓ pascal

9. In the second condition of equilibrium, condition _____ is satisfied.

Ⓐ $\sum \vec{w} = 0$ Ⓑ $\sum \vec{F} = 0$ Ⓒ $\sum \vec{P} = 0$ Ⓓ $\sum \vec{\tau} = 0$

10. The unit of strain is _____.

Ⓐ Nm^2 Ⓑ Joule Ⓒ Nm ● No unit

11. Dark, rough surfaces are generally good for _____.

Ⓐ Reflection Ⓑ Convection ● Radiation Ⓓ Conduction

12. _____ is measured by using a measuring cylinder.

● Volume Ⓑ Area Ⓒ Mass Ⓓ Weight

Note: Time allowed for section B and C is 2 hours and 40 minutes.

SECTION "B"

Marks: 32

II Attempt any EIGHT Parts out of the following. Each Part carries equal marks.

i. Name the seven S.I base units of measurement.

ii. How are heat losses are reduced in a Thermos flask?

iii. Why is it dangerous to jump out of a moving car?

iv. Which material is more elastic, steel or rubber and why?

v. Why liquids have two Co-efficients of expansion?

vi. Define scalar and vector quantities. Give examples?

vii. Under what condition displacement is equal to the distance?

viii. How you determine the center of gravity of irregular shape body?

ix. If the distance between two objects is tripled, what is the decrease in gravitational force?

x. How much energy is generated when 1 gram of mass is completely converted into energy?

xi. Define any two of the following.

(i) Mechanics (ii) Atomic Physics (iv) Nuclear Physics

SECTION "C"

Marks: 21

Note: Attempt any THREE questions of the following. Each question carries equal Marks.

III. (a) State and Explain Newton's law of universal gravitation. 4

(b) The velocity of a truck increases in 30.sec from 20 m/sec *to* 100 m/sec. Find average acceleration of the truck. 3

IV. (a) Prove that $KE = \frac{1}{2}mv^2$? 4

(b) A bullet of mass 50 grams travels at a speed of 1200 m/sec. Find its kinetic energy. 3

V. (a) Define Hydrostatic pressure and show that $P = \rho gh$ 4

(b) What is the pressure at a depth of 10,000 cm below the surface of water? 3

VI. (a) What is meant by Thermal expansion? Give its molecular explanation. 3

(b) A body is thrown vertically upward with a speed of 30 m/sec. how high will it rise? (take $g = 10$ m/sec^2) 4