Paper: ___Physics_____		Total Marks: _____
Month Test: __3rd Term_____		Obt. Marks: _____
Theme/Unit: ____3, 4_____		Grand Total: _____
Objective/Subjective:	ID: _____	Time: _____
Name: _____	class: _____11th_____	Section: _____ _____

Q No: 1 Encircle the correct answer (15×1=15)

1: The area under the velocity time graph is

a: Force b: acceleration c: Distance d: Torque

2: When the velocity time graph is straight line parallel to time axis, then:

A: a is constant B: a is variable C: a is zero

D: velocity is zero

3: The unit of acceleration is:

a: ms^{-1} b: ms c: ms^{-2} d: m^2s

4: The slope of velocity time graph gives:

a: Distance b: Area c: Acceleration d: Speed

5: A stone is thrown up from the surface of earth when it reaches its maximum height, its K.E is equal to:

a: Zero b: mgh c: $\frac{1}{2}$ mv^2 d: 2mgh

6: The distance covered by free falling body in two seconds is:

a: 9.8m b: 19.6m c: 44.4m d: 49m

7: The value of 'g' at the centre of earth is:

a: infinite b: 2g c: 3g d: zero

8: The mass of an object is the quantitative measure of its:

a: Momentum b: Acceleration c: Inertia d: energy

9: When a ball is thrown straight up, the acceleration at its highest point is:

a: upward b: downward c: zero d: horizontal

10: The law of inertia was first formulated by:

a: Aristotle b: Galileo c: Newton d: Einstein

11: The rate of change in momentum of a body is equal to:

a: Displacement b: velocity c: acceleration d: applied force

12: The velocity of projectile at maximum height is:

a: $v_i \cos\theta$ b: Zero c: maximum d: $v_i \sin\theta$

13: The trajectory of a projectile is:

a: circle b: Parabola c: hyperbola d: straight line

14: Kilowatt hour is the unit of:

a: energy b: Power c: Pressure d: Force

15: Which one is the biggest unit of energy?

A: erg b: joule c: watt-hour d: Kilo-watt hour

Q No: 2 Short Questions (7×2=14)

1: Define power and instantaneous power. Give its unit.

2: A girl drops a cup from a certain height, which breaks into pieces. What energy changes are involved?

3: An object is thrown vertically upward. Discuss the sign of acceleration due to gravity, relative to the velocity, while the object is in air?

4: Define impulse and show that how it is related to linear momentum?

5: At what point or points in its path does a projectile have its minimum speed, its maximum speed?

6: What is inertia? Explain.

7: Define elastic and inelastic collision?

Q No: 3 Long Questions (6+5)

1: Briefly explain absolute potential energy?

2: A truck weighing 2500 kg and moving with a velocity of 21ms^{-1}collides with a stationary car weighing 1000 kg. The truck and the car move together after the impact. Calculate their common velocity.