IMPORTANT MCQS FOR SECTION A **IX PHYSICS**

CHAPTR # 1

1:The branch of Science which deal with Matter, Energy, and their mutual relationship is called_____.

- a) Physical Chemistry
- b) Biology
- c) Physics
- d) Chemistry

2: The famous Muslim Scientist Yaqoob Kindi worked in the field of _____.

- a) Medicine
- b) Geology
- c) Psychology
- d) Optics

3: The branch of Physics which deal with the study of the motion of objects and how it relates to force is called_____.

- a) Quantum Physics
- b) Cosmology
- c) Mechanic
- d) Electrostatics

4: All the measurable quantities are known as:

- a) Base Quantities
- b) Derived Quantities
- c) Units
- d) Physical Quantities

5: Electric current is a _____ Physical quantity.

- a) Derived
- b) Base
- c) Both a and b

CHAPTER # 2:

1: If a body does not change its position with respect to an observer we can say that the body is:

- a) at rest
- b) accelerated
- c) displaced
- d) at motion

2: Location of an object relative to some reference is known as_____

- a) Position
- b) Displacement
- c) Velocity
- d) Speed

3: Motion of falling bodies is_____

- a) Rotatory Motion
- b) Random Motion
- c) Translatory Motion
- d) Vibratory Motion

4: Weight, velocity and friction are _____ quantities.

- a) Scalars
- b) Vectors
- c) Both a and b
- d) None of these

5: For scalar quantities, we do not need to know about the_____of an object.

- a) Weight
- b) Mass
- c) Direction
- d) None of these

6: A graph is a a_____ representation of information showing quantity varies with another related quantity.

- a) Symbolic
- b) Visual
- c) Audio
- d) Video

7: The shortest directed distance between two position is called_____

- a) Velocity
- b) Acceleration
- c) Distance
- d) Displacement

8: Which of the following is the S.I Unit of speed?

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

9: $\vec{V} = \frac{\Delta \vec{s}}{\Delta t}$ **is the mathematical representation of:**

- a) Acceleration
- b) Velocity
- c) Displacement
- d) Distance

10: The average acceleration is the total velocity divided by the total:

- a) Speed
- b) Mass
- c) Acceleration
- d) Time

CHAPTER # 3

1: The downward force with which the earth pulls a body toward its center is called_____.

- a) Mass
- b) Acceleration
- c) Weight
- d) Momentum

2: The force which compels a body to move in a circular path, is called_____.

- a) Centripetal Force
- b) Net force
- c) Friction force
- d) None of these

3: When a body rolls over a surface, the force of friction is called_____.

- a) Static Friction
- b) Kinetic Fraction
- c Rolling Friction
- d) None of above

4: A physical quantity that moves or tends to move a body, stop or tends to stop a moving body is called_____.

- a) Force
- b) Velocity
- c) Speed
- d) Acceleration

5:The S.I unit of force is _____.

- a) Ohm
- b) Joule
- c) Newton
- d) Pascal

6: When $F_{net}=0$ the $\Delta V=0$ or $a=0$ this represent Newton _____ Law of motion.

- a) First
- b) Second
- c) Third
- d) None of these

7: Newton second law of motion is mathematically represented as:

- a) $a=Fm$
- b) $F=ma$
- c) $F=ma^2$
- d) $F=m^2a^2$

8: Newton _____ law is also called the Law of Inertia.

- a) First
- b) Second
- c) Third
- d) First and Third

9: The value of g in w=mg is:

- a) 7.8m/s
- b) $9.8m/s^2$
- c) $9.7\ m/s^2$
- d) $8.9\ m/s^2$

10: The product of mass "m" and velocity "v" is called_____.

- a) Friction
- b) Velocity
- c) Collision
- d) Momentum

CHAPTER#4

1: When we apply force with our both hands on the steering wheel of a car to turn it the force we are applying is:

- a) Like a parallel force
- b) Unlike parallel force
- c) Both Like and Unlike Parallel
- d) None of these

2: The process of spitting a force vector into two or more force vectors is called_____.

- a) Resolution of Forces
- b) Addition of Forces
- c) Rotation of Forces
- d) None of these Forces

3: The type of motion in which all points of an object moves about a single fixed axis is called_____.

- a) Random motion
- b) Trasnlatory motion
- c) Rotational motion
- d) Vibratory motion

4: The point about which mass is equally distributed in all diretions is known as:

- a) Center of Gravity
- b) Mass
- c) Center of Mass
- d) Torque

5: The S.I unit of Torque is_____.

- a) Nm
- b) m/s
- c) N/m
- d) Nm^2

6:Turning effect produced in a body about a fixed point due to applied force is called _____.

- a) Gravity
- b) Velocity
- c) Equaliburm
- d) Torque

7: Torque τ is mathematically represented as:

- a) $\tau = d/F$
- b) $\tau=F^2 \times d$
- c) $\tau=F \times d$
- d) $\tau= F \times d^2$

8: $\vec{F}_{net} = \sum_{i=1}^{i=n} \vec{Fi} = 0$

Mathematically represents:

- a) Torque
- b) First Condition of equilibrium
- c) Second Condition of equilibrium
- d) Moment of force

9: A single point where the whole weight of an object appears to act is known as :

- a) Center of Mass
- b) Stability
- c) Couple
- d) Center of Gravity

10: The combination of two or more than two vectors to get a single vector is called_____.

- a) Addition of Vectors
- b) Subtraction of Vectors
- c) Subtraction of Vectors
- d) Multiplication of Vectors

CHAPTER#5

1: Our Milky way galaxy is a _____.

- a) Rectangle-shaped
- b) Square-shaped
- c) Disk-Shaped
- d) Triangle-Shaped

2: Law of Universal was proposed by:

- a) Newton
- b) Stephen Hawking
- c) Einstien
- d) None of these

3: The value of gradational constant is_____

- a) 8.67 $x10^{-11}$ Nm^2Kg-2
- b) 6.67×10^{-11} Nm^2Kg-2
- c) 7.6×10^{-11} Nm^2Kg-2
- d) 9.8×10^{-11} Nm^2Kg-2

4: _____is the the closest planet to the Sun.

- a) Earth
- b) Neptune
- c) Venus
- d) Mercury

5: Any object purposely placed into the orbit of Earth or other planets, star or Sun are termed as:

- a) Natural Satelite
- b) Artificial Satelite
- c) Planet
- d) Galaxy

6: In circular orbit a satelite has a constant trangential speed called_____.

- a) Angular Velocity
- b) Angular Speed
- c) Contact Acceleration
- d) Orbital Velocity

7: The acceleration of bodies falling freely toward the earth is called_____.

- a) Gravitational force
- b) Orbital Velocity
- c) Gravitational Acceleration
- d) None of above

8: The value of gravitational acceleration 'g' decreases as altitude:

- a) Increases
- b) Decreases
- c) Remain same
- d) None

9: Orbital velocity is the velocity of a satellite that moves around the _____ at a specific height.

- a) Sun
- b) Moon
- c) Mercury
- d) Earth

10: The radius of Earth r_E is :

- a) 6.4×10^6m
- b) 9.8×10^6m
- c) 6.6×10^{-11} m
- d) 6×10^6m

CHAPTER # 6

1: When an object moves distance 'S' in the direction of applied force 'F' the work done will be:

- a) W= F/S
- b) W=F2 x S
- c) W= F x S^2
- d) W= Fcosθ x S

2: The SI unit of Work is _____.

- a) Joule
- b) Pascal
- c) Newton
- d) Meter

3: Workdone is a _____ quantity.

- a) Scalar
- b) Vector
- c) Both a and b
- d) None of these

4: Equation E_k=½ mv^2 mathematically represents:

- a) Potential Energy
- b) Electrical Energy
- c) Mechanical Energy
- d) Kinetic Energy

5: The SI Unit of Energy is _____

- a) Newton
- b) Joule
- c) Pascal
- d) None of these

CHAPTER # 7

1: The motion of swing is an example of:

- a) Rotatory Motion
- b) Vibratory Motion
- c) Random Motion
- d) None of these

2: A cyclist is moving with a uniform acceleration of 3 m/s^2 how much tir required to change velocity from 6 m/s to 12 m/s?

- a) 18 sec
- b) 12 sec
- c) 2 sec
- d) 3 sec

3: Mechinics deals with the study of motion of object:

- a) With force
- b) Without force
- c) Due to fraction
- d) Both a and b

4: A man covered 78 m distance in 30 sec what will be the speed of man:

- a) 2.6 m/s
- b) 5.2 m/s
- c) 78 m/s
- d) 30 m/s

5:A butterfly flight in a garden what type of motion will follow?

- a) Curved motion
- b) Vibratory motion
- c) Random motion
- d) Both a and c

CHAPTER # 8

1: Plasma exists in the _____ where thermonuclear reactions take place at very high temperatures.

- a) Earth
- b) Moon
- c) Sun
- d) Mercury

2: In solid objects the attractive forces between the molecules are:

- a) Weak
- b) Strong
- c) Less than Liquids
- d) Less than Gases

3: The mass of substance per unit volume is called_____.

- a) Pressure
- b) Stress
- c) Strain
- d) Density

4: In System Internation the unit of density is:

- a) Kgm3
- b) Kgm^{2}
- c) Kgm^{-3}
- d) Kgm^{-1}

5: Pressure exerted by the atmosphere is known as :

- a) Atmospheric Pressure
- b) Internal Pressure
- c) External Pressure
- d) None of these

CHHAPTER # 9

1: The thermal energy transferred from a hotter body to a cooler body is called_____.

- a) Temperature
- b) Heat
- c) Internal Energy
- d) None of these

2: In Fahrenheit scale, the ice point is marked as 32 °F and the stream point is marked as:

- a) 210 °F
- b) 220 °F
- c) 212 °F
- d) 100 °F

3: The increase in length of a substance due to a rise in temperature is called_____.

- a) Linear thermal Expansion
- b) Volume thermal expansion
- c) Both
- d) None of above

4: The S.I unit of specific heat capicity is:

- a) $JKg^{2}K^{2}$
- b) $JKg^{-1}K^{-2}$
- c) $JKg^{-1}K^{-1}$
- d) None of these

5: The amount of heat required to convert the liquid state of mass to gases state of mass is called_____

- a) Critical Heat
- b) Highest Heat
- c) Lowest Height
- d) Latent Heat

CHAPTER # 10

1: Heat is transferred in the form of _____

- a) Wave
- b) Potential Energy
- c) Energy
- d) Kinetic Energy

2: Heat is transferred from_____ bodies.

- a) Hot to Cold
- b) Cold to Cold
- c) Cold to Hot
- d) Hot to Hot

3: The normal human body temperature is _____.

- a) 37 °F
- b) 25 °F
- c) 212 °F
- d) 98 °F

4: Which color of the material is a good absorber and emitter of heat?

- a) Black
- b) White
- c) Red
- d) Blue

5: Which of the following is the best heat conductor?

- a) Solid
- b) Liquid
- c) Gase
- d) None of these