**SENIOR QUIZ QUESTION PHYSICS**

1. **What type equilibrium is the one where the centre of gravity is always within the base of the object? One attempt only.**

**Ans: Neutral Equilibrium**

1. **What radio active detecting device uses liquid hydrogen?**

**Ans: Cloud Chamber**

1. **The time required for a given mass of radio active material to decay to half its original mass is called?**

**Ans: Half life**

1. **The most abundant isotope of uranium is?**

**Ans: Uranium 238**

1. **Which principle states that “For the horizontal flow of a fluid through a tube, the sum of the pressure and kinetic energy per unit volume of a fluid is a constant”?**

**Ans: Bernoulli’s Principle**

1. **Two waves having the same amplitude and frequency travel through the same medium and are superposed. The resultant wave will have an increased ………………………………… (One attempt only?**

**Ans: Amplitude**

1. **What term is used to describe an object which transmits high but diffuse it so that substance seen through them cannot be identified?**

**Ans: translucent objects**

1. **Increased loudness produced when two bodies vibrate sympathetically is called?**

**Ans: Resonance**

1. **What is usual expression of unit for momentum?**

**Ans: kilogram metres per second (kgm/s)**

1. **What two factors determine the range of the mercury thermometer?**

**Ans: Volume of the bulb and stem**

1. **What do you call the process where two bodies A and B have no net transfer of thermal energy between them?**

**Ans: thermal Equilibrium**

1. **Why is shiny surface of a body considered to be a poor absorber?**

**Ans: it reflects radiant energy**

1. **Which factor affects the pitch of sound?**

**Ans: Frequency**

1. **What term can be used to describe the angle formed as a result of movement of light ray from the denser medium to less dense medium?**

**Ans: Refraction**

1. **What is the function of the Variable resistor or Rheostat?**

**Ans: To vary the current in a circuit**

1. **If electrical energy cost is K150 per unit. What is the cost of running an air conditioner with the power of 1000W for 8 hours?**

**Ans: K1200 = 00**

1. **Charging an accumulator is an example of energy conversion from ……………….**

**Ans: Electrical energy to chemical energy**

1. **Which law states that, an induced current flow in a direction so as to oppose the change producing it?**

**Ans: Lenz’s Law**

1. **A device which is used to detect a feeble current is called?**

**Ans: Galvanometer**

1. **An electromagnet is based on what property?**

**Ans: electromagnetic induction**

1. **A temperature of 50o is equivalent to temperature change of how many Kelvins?**

**Ans: 50 Kelvin**

1. **Ordinary water waves travel at greater speed in deeper water than in shallow water. What term is used to describe this behavoiur?**

**Ans: Refraction**

1. **A sound wave takes 2 milliseconds to pass a detector. What is its frequency?**

**Ans: 50 Hz or 1/0.002Hz**

1. **What form of energy does a substance gain or lose when it changes state?**

**Ans: Latent heat**

1. **What name is given to the rule that states that at each junction the total current flowing into junction equal the total current leaving the junction.**

**Ans: Kirchoff’s Junction Rule**

1. **If pressure is applied to ice its freezing point falls. The effect is known as ?**

**Ans: Regelation**

1. **A gas which follows the gas laws precisely is known as?**

**Ans: Ideal gas**

1. **The law which governs the rate of loss of heat from a body to its surrounding is known as?**

**Ans: Newton’s Law of Cooling**

1. **A body that is projected through a gravitational field is known as?**

**Ans: projectile**

1. **The force needed to overcome the frictional force when the bodies are at rest is called?**

**Ans: Static Force**

1. **The frictional forces within the liquid act between one layer and another. Such a motion is called?**

**Ans: lamina flow**

1. **The transmission of light through glass fibre is one of the most important use of total internal reflection.**

**This use of glass is known as?**

**Ans: Fibre Optics**

1. **What name is given to the wave in which the amplitude varies from place to place along a wave?**

**Ans: stationery or standing wave**

1. **If a ball is stuck at angle α where tanα is 4/3 with an initial speed of 25m/s. Find the time when the height of 15m above the ground.**

**Ans: t = 1.3s**

1. **A horizontal force of 0.5N acts on a body of mass 0.kg where frictional Force is 0.2N. What is the acceleration of the body?**

**Ans: 1.5m/s2**

1. **A body of mass 2kg travelling at 10 m/s encounters a constant frictional force of 5N. How long does it take for the body to come to rest?**

**Ans: 4s**

1. **Name the device which is used to demonstrate the principle of electrostatic induction.**

**Ans: Electroscope**

1. **State four force experienced by an aero plane in flight.**

**Ans: 1. Thrust 2. Drag 3. Upthrust 4. Weight**

1. **A point A is at a potential of 240V and another point is at a potential of 120V. Find the work done in moving a charge of 10 Coulomb from A to B.**

**Ans: 1200J (Joules) or 1.2Kj (Kilojoules)**

1. **What kind of motion produced by a vehicle braking with the wheels locked?**

**Ans: Uniform deceleration**

1. **State the approximate terminal velocity of a human body falling freely without a parachute.**

**Ans: 50 m/s**

1. **What do we call the angular dispersion per mean deviation of a prism or lens?**

**Ans: Dispersive power**

1. **Monochromatic light has one colour. Name an instrument that is used to produce this kind of light.**

**Ans: Laser**

1. **A bat does not see, however it is able to detect some obstacles. State the wave produced by a bat which enables it to detect obstacles.**

**Ans: Ultra – sonic wave**

1. **A dental technician uses a small mirror that gives a magnification of 4.0 when held 0.60 cm from a tooth. What is the radius of curvature of the mirror?**

**Ans: 1.6 cm**

1. **Two plane mirrors make an angle of 90o with each other. A point – like luminous object is placed between them. How many images are formed?**

**Ans: 3**

1. **What is the minimum value of the refractive index for a 45.0o prism which is used to turn a beam of light by total internal reflection through a right angle?**

**Ans: Minimum **