FBQ1: The frequency of energy transfer in a coupling system depends on ____. Answer: *Time taken* FBQ2: At high frequencies of LCR series circuit the inductive reactance is Answer: *Large* FBQ3: Error due to wear and tear in instruments such as screw gauge or spherometer due to defective fittings is called_ Answer: *Back lash error* FB04: _ waves are also refer to as standing wave. Answer: *Stationary* FBQ5: The ratio of longitudinal stress to strain within the elastic limit is -Answer: *Young modulus* _ displacement of bob on either side of its equilibrium position is called amplitude. Answer: *Maximum* FBQ7: The simple pendulum has its equilibrium position at the ____. Answer: *center* FBQ8: An isolated system vibrates with its natural ____. Answer: *Frequency* FBQ9: The change in length per unit original length of the wire is called ____. Answer: *Longitudinal strain* FBQ10: A wave which transports energy as it propagates in space is said to be Answer: *progressive* FBQ11: The restoring force per unit area set up inside the body is called _____. Answer: *Stress* FBQ12: The type of error present if three or more observers carrying out an experiment separately and using the same set of instruments obtained different sets of values is known as___.
Answer: *Random error* FBQ13: Errors which affect measurements in a regular way or in some constant proportion such as instrument errors arising from faulty instruments are _ Answer: *Systematic error* FBQ14: The opposition offered by resistance is dependent on the frequency in an inductor and a _ Answer: *Capacitor* FBQ15: The time interval between the input stimulus and its response is reaction Answer: *time* FBQ16: The principle of conservation of energy is particular reference to conservation of ____energy Answer: *Mechanical* FBQ17: Beyond the elastic limit the applied force produced _____deformation Answer: *Plastic* FBQ18: The magnitude of applied force up to which a specimen retains its elastic

property defines the elastic Answer: *limit*
FBQ19: A simple pendulum is a body capable of oscillating freely about a horizontal passing through it. Answer: *Rigid*
FBQ20: The ability for a material to recover its original configuration is called Answer: *elasticity*
FBQ21: Error that occurs as a result of zero marking of the metre scale that has been worn out is called $__$. Answer: *End correction*
FBQ22:motion is a universal phenomenon Answer: *Oscillatory*
FBQ23: The process when the pendulum loses energy due to air resistance is calledmotion. Answer: *Damped*
FBQ24: The period (T) increases with an/a in the length of the pendulum. Answer: *Increase*
FBQ25: The length of the pendulum can be determined by adding the length of the string with the of the pendulum bob. Answer: *radius*
FBQ26: Atime is a more accurate automatic switching device. Answer: *Digital*
FBQ27: As the temperature increases, the conductivity of the semi-conductor
Answer: *increases*
FBQ28: An ordinary stopwatch has a least count of Answer: *0.1seconds*
FBQ29: The time taken by the pendulum to complete one oscillation is called
Answer: *Period*
FBQ30: The value of certain physical qualities can be determined from the slopes of a line of graph. Answer: *Straight*
FBQ31: The fluctuation in the many times repeated measurement of the same quantity is callederror. Answer: *Random*
FBQ32: Errors arising from arithmetic miscounting a number of periods, faulty electrical contacts, wrong scale reading are Answer: *Erratic error*
FBQ33: The systematic errors is also callederrors Answer: *Determinant*
FBQ34: unit is used when measuring the inter-city distances. Answer: *Kilometer*
FBQ35: The semi-conductor formed that develops an excess of free electron is called Answer: *N-type*

Multiple Choice Questions (MCQs) For PHY220: MCQ1: Which of the following is the circuit containing only a coil and a resistor in series? Answer: RL-series
MCQ2: In static method the measurement of extension of a spring is a function of
Answer: length
MCQ3: The maximum displacement of the bob on either side of its equilibrium position is called Answer: Period of oscillation
MCQ4: If the time taken for twenty (20) oscillations in 2 minutes 50 seconds the period (T) is $___$ Answer: 10s
MCQ5: The time taken by the pendulum to complete one oscillation is known as
Answer: Period of oscillation
MCQ6: Pendulum bulb loses energy due to which of the following? Answer: Air resistance
MCQ7: The process of gradually decreases in the amplitude of oscillations of the pendulum bob is called $__$. Answer: Damping
MCQ8: Error due to wear and tear in the instrument is called Answer: Random error
MCQ9: One of the following must be known in order to decide upon the type of a spring for a particular purpose, Answer: Elastic limit
MCQ10: The method of determining the spring wire is Answer: Dynamic method
MCQ11: One of the following is a function of extension, in a static method of Experiment Answer: Time
MCQ12: The magnitude of applied force up to which a specimen retains its elastic property is defined as the Answer: strain
MCQ13: Precision is a function of Answer: Possible error
MCQ14: The time taken to complete one oscillation is called Answer: Frequency
MCQ15: The maximum displacement of the bob on either side of its equilibrium position is called $__$. Answer: Amplitude
MCQ16: The method of determining the spring wire is Answer: Dynamic method
MCQ17: The magnitude of applied force up which a specimen retains its elastic property is defines as the Answer: Strain

MCQ18: In static method, the measurement of extension of a spring is a function of Answer: Length
MCQ19: Dynamical method in spring-mass system is based on which period of oscillation? Answer: damped
MCQ20: The junction formed when the holes from the p-side diffuse into the n-side and combine with free electrons and electrons from the n-type diffuse to the p-side and combine with holes is called Answer: Combined layer
MCQ21: Two bodies moving along the same line but in opposite directions collide. This type of collision is said to be? Answer: head-on
MCQ22: Where there is no external force acting on a system of particles, the total linear momentum of the system is Answer: Non-conserve
MCQ23: The quality of sound produced depends upon which of the following vibration of the stretched string? Answer: Frequency
MCQ24: A wave which transports energy as it propagates in space is said to be one of the following Answer: Stationary
MCQ25: The points corresponding to zero amplitude are called Answer: Equilibrium
MCQ26: One of the following is the name of a point with maximum amplitudes Answer: antinode
MCQ27: Where there is no external force acting on a system of particles, the total linear momentum of the system is Answer: Non-conserve
MCQ28: The property of a wire to tend to come back to its original length when the suspended weight is removed is called Answer: Elastic limit
MCQ29: The internal force that come to play within a body that is subjected to deforming force is called Answer: Recall
MCQ30: The maximum stress a material can sustain without undergoing permanent deformation is termed as Answer: Elastic
MCQ31: Which of the following is the principle for measurement of low resistance methods based Answer: Potentiometer
MCQ32: The resistance to motion of a pendulum bulb is known as Answer: Impedance
MCQ33: The quality of sound produced depends upon which of the following vibration of the stretched string. Answer: Frequency
MCQ34: A wave which transports energy as it propagates in space is said to be one of the following:

Answer: Stationary

MCQ35: The points corresponding to zero amplitude is called $___.$ Answer: Equilibrium