Q. 1 When an external force is applied on an elastic body, then body changes its size and shape and the body is said to be _____.

(a) regained (b) restored

(c) deformed (d) plastic

Ans. : (c)

Q. 2 The force applied on a body which is responsible for change of size and shape of the body is called as_____.

(a) restoring force

(b) deforming force

(c) internal force

(d) regaining force

Ans. : (a)

Q. 3 In the case of elastic body, body regains its original size and shape on removal of external deforming force if and only if the external force is_____.

(a) within elastic limit

(b) more than elastic limit

(c) too large

(d) equal to deforming force

Ans. : (a)

Q. 4 The property on account of which body regains its original size and shape on removal of external deforming force is called as_____.

(a) plasticity (b) elasticity

(c) rigidity (d) ductility

Ans. : (b)

Q. 5 Which of the following is perfectly elastic body ?

(a) Foam (b) Sponge

(c) Chalk (d) Quartz

Ans. : (d)

Q. 6 Shear strain is defined as_____.

(a) Force per unit area

(b) Area per unit force

(c) Lateral displacement □ distance from fixed layer

(d) Lateral displacement of layer / its distance from fixed layer

Ans. : (d)

Q. 7 All metals are in nature._____.

(a) Elastic (b) Plastic

(c) Rigid (d) Ductile

Ans. : (a)

Q. 8 Clay, putty and chalk are examples of_____.

(a) Elastic body (b) Plastic body

(c) Rigid body (d) None of these

Ans. : (b)

Q. 9 Stress is defined as,_____.

(a) Internal restoring force per unit area

(b) Area per unit internal restoring force

(c) Product of internal restoring force and area

(d) none of these

Ans. : (a)

Q. 10 The unit of stress is_____.

(a) m^2/N (b) N/m^2

(c) Nm^2 (d) J/m^2

Ans. : (b)

Q. 11 The maximum stress the system is capable of withstanding is known as_____.

(a) Breaking stress (b) Ultimate Stress

(c) Working Stress (d) Tensile stress

Ans. : (b)

Q. 12 Longitudinal strain is defined as_____.

(a) F/A (b) A/F

(c) dl/L (d) L/dl

Ans. : (c)

Q. 13 The portion in stress strain diagram which shows permanent elongation in the wire is called as_____.

(a) Yield (b) Elastic limit

(c) Set (d) Breaking point

Ans. : (c)

Q. 14 If two different wires of steel and aluminum of same dimensions are taken then_____.

(a) Elasticity of both wires will be same

(b) Elasticity of both wires will be different

(c) Elasticity depends on what dimension it has

(d) none of above

Ans. : (b)

Q. 15 The unit of strain is,_____.

(a) N/m^2 (b) No unit

(c) Nm^2 (d) J/m^2

Ans. : (b)

Q. 16 Stress is equal to,_____.

(a) A / F (b) F × A

(c) F / A (d) F + A

Ans. : (c)

Q. 17 Tensile stress is also called as,_____.

(a) Lateral stress (b) Longitudinal stress

(c) Volume stress (d) Shearing Stress

Ans. : (b)

Q. 18 The stress which is related to change in length of the body is called as,_____.

(a) Lateral stress (b) Longitudinal stress

(c) Volume stress (d) Shearing Stress

Ans. : (b)

Q. 19 Which of the following is dimensionless quantity?

(a) Stress (b) Strain

(c) Pressure (d) Area

Ans. : (b)

Q. 20 The stress which is related to change in volume of the body is called as,_____.

(a) Lateral stress (b) Longitudinal stress

(c) Volume stress (d) Shearing Stress

Ans. : (c)

Q. 21 The stress which is related to change in shape of the body is called as, _____.

(a) Lateral stress (b) Longitudinal stress
(c) Volume stress (d) Shearing Stress

Ans. : (d)

Q. 22 Volume stress the body is equal to_____.

(a) Change in pressure
(b) Product of force and area
(c) Area per unit force
(d) Addition of force and area

Ans. : (a)

Q. 23 Tensile strain is defined as_____.

(a) Change In length per unit original length
(b) Change in volume per unit original volume
(c) Original volume per unit change in volume
(d) Original length per unit change in length

Ans. : (a)

Q. 24 Volume strain is defined as_____.

(a) Change In length per unit original length
(b) Change in volume per unit original volume
(c) Original volume per unit change in volume
(d) Original length per unit change in length

Ans. : (b)

Q. 25 Because of hammering and rolling, the elasticity of the material_____.

(a) Increases (b) Decreases
(c) Remains same (d) None of these

Ans. : (a)

Q. 26 Because of recurring stress on a wire_____.

(a) Elasticity Increases and Plasticity decreases
(b) Elasticity and Plasticity decreases
(c) Elasticity and Plasticity Increases
(d) Elasticity decreases and Plasticityincreases

Ans. : (d)

Q. 27 If the force of 10 N is required to move plate of area 100 m^2 over a liquid, the force required to move a plate with same velocity over a same liquid of area 200 m^2 will be_____.

(a) 10 N (b) 20 N
(c) 30 N (d) 40 N

Ans. : (b)

Q. 28 Identify the correct relation from the following_____.

(a) Y = Tensile stress × Tensile strain
(b) Y = Tensile stress / Tensile strain
(c) Y = Tensile strain / Tensile stress
(d) Y = Tensile stress × area

Ans. : (b)

Q. 29 The lift having a capacity of 20 persons carries a message saying " only 5 persons". Here the stress corresponding to 5 person is and the stress corresponding to 20 persons is _____.

(a) Working stress, Ultimate stress
(b) Ultimate stress, Working stress
(c) Breaking stress, Working stress
(d) Breaking stress, Working stress

Ans. : (a)

Q. 30 A longitudinal stress of 8×10^7 N/sq.m produces an extension of 1 mm in a wire of length 2 m. Find Young's modulus of the material of wire_____.

(a) 1.6×10^{11} N/sq.m (b) 16×10^{11} N/sq.m
(c) 0.166×10^{11} N/sq.m (d) 160×10^{11} N/sq.m

Ans. : (a)

Q. 31 Match the pairs

A. Annealing	1. The crystal grains break up into smaller units
B. Recurring stress	2. Intermolecular forces decreases
C. hammering Rolling	3. The metal is heated and cooling gradually
D. Temperature	

(a) A-4, B-2, C-1, D-3 (b) A-4, B-3, C-2, D-1
(c) A-3, B-4, C-1, D-2 (d) A-1, B-2, C-3, D-4

Ans. : (a)

Q. 32 The elastic limit is the maximum stress to which body can be subjected _____.

(a) With permanent deformation
(b) Without permanent deformation
(c) Without partial deformation
(d) with partial deformation

Ans. : (b)

Q. 33 Si unit of Stress is _____.

(a) N/meter^2 (b) meter^2 /N
(c) Newton-meter (d) m^2-Newton

Ans. : (a)

Q. 34 A wire of length 3 m extends by 3 mm when a force of 2 N is applied to it. Calculate stress produced in it if Y = 2×10^{11} N/m^2_____.

(a) 2×10^8 N/m^2 (b) 2×10^7 N/m^2
(c) 0.2×10^8 N/m^2 (d) 0.2×10^8 N/m^2

Ans. : (a)

Q. 35 Two wires have same material and length 1 m and 2 m respectively have respective radii 2r and r. They are subjected to same load. The respective ratio of their elongation is_____.

(a) 8:1 (b) 1:8

(c) 4:1 (d) 1:4

Ans. : **(b)**

Q. 36 From the following select the correct formula for the bulk modulus of elasticity where all symbols have usual meanings_____.

(a) V.(dP/dV)

(b) V(dP × dV)

(c) V.dP

(d) P/V.dV

Ans. : **(a)**

Q. 37 Identify the correct statement from the following.

(a) If the restoring force is more, elasticity of material is more

(b) There is no relation between restoring force and elasticity

(c) If restoring force is less, elasticity of material is more

(d) If the restoring force is more, elasticity of material is less

Ans. : **(a)**

Q. 38 The radii of two wires of same material are in ratio 2:1. if the wires are stretched by equal forces, the stress produce in wires is in ratio respectively_____.

(a) 2:1 (b) 4:1 (c) 1:4 (d) 1:2

Ans. : **(c)**

Q. 39 1 N = _____.

(a) 100000 dyne (b) 10000 dyne

(c) 1000 dyne (d) 100 dyne

Ans. : **(a)**

Q. 40 Out of the following, Identify the correct relation between Young's modulus, Bulk modulus and Modulus of rigidity _____.

(a) $1/Y = 1/3\eta + 1/9K$ (b) $1/3Y = 1/\eta + 1/9K$

(c) $1/9Y = 1/3\eta + 1/K$ (d) $1/Y = 3/\eta + 9/K$

Ans. : **(d)**

Q. 41 An iron bar of length 'l' m and cross section 'A' sq.m is pulled by a force 'F' newton from both ends so as to produce and elongation in meters. Which of the following statement is correct?

(a) Elongation is inversely proportional to length 'l'

(b) Elongation is directly proportional to cross sectional area

(c) Elongation is inversely proportional to 'A'

(d) Elongation is directly proportional to Young's Modulus

Ans. : **(c)**

Q. 42 Young's modulus of material of wire of length L and radius r is Y N/m^2. if the length is reduced to L/2 and radius to r/2, the Young's modulus will be_____.

(a) Y (b) Y/2

(c) 2Y (d) Y/4

Ans. : **(a)**

Q. 43 Deformation is produced in the body is due to_____.

(a) The displacement of the molecules from their original position

(b) The restoring force is act on body

(c) Neither A nor B

(d) Both A and B

Ans. : **(d)**

Q. 44 Adding potassium to gold the elasticity of gold_____.

(a) Increases

(b) Decreases

(c) Sometime increases and sometime decreases

(d) Does not change

Ans. : **(a)**

Q. 45 A lift having actual capacity of 20 persons carries message saying only for 5 persons. This is because of _____.

(a) Ultimate stress (b) Working stress

(c) Breaking stress (d) Factor of Safety

Ans. : **(d)**

Q. 46 The ratio of lateral displacement of any layer to its distance from the fixed layer is called_____.

(a) Tensile Strain (b) Bulk Strain

(c) Shearing Strain (d) Shearing stress

Ans. : **(c)**

Q. 47 The ratio of lateral strain to longitudinal strain is called as _____.

(a) Poisson's ratio
(b) Compressibility
(c) Bulk Modulus
(d) Young's modulus

Ans. : (a)

Q. 48 The ratio of change in diameter to its original diameter is called as_____.

(a) Stress (b) Strain
(c) Poisson's ratio (d) None of the above

Ans. : (b)

Q. 49 Elasticity of steel is_____.

(a) More than rubber
(b) Less then rubber
(c) More or less than rubber-depend on dimensions
(d) Same as that of rubber

Ans. : (a)

Q. 50 If we take 1m long steel wire and 2m long steel wire then_____.

(a) Elasticity of 1m will be more than 2m
(b) Elasticity of 2m will be more than 1m
(c) Elasticity of 1m and 2m will be same
(d) depends on diameter of wire

Ans. : (c)

Q. 51 Speed is a_____ Quantity and velocity is a _____ Quantity

(a) Vector, Scalar (b) Scalar, Vector
(c) Scalar, Scalar (d) Vector, Vector

Ans. : (b)

Q. 52 Negative Acceleration is called as_____.

(a) Slow acceleration
(b) Retardation
(c) Retardation
(d) Gravitational Acceleration

Ans. : (b)

Q. 53 Acceleration is given by_____.

(a) Time / Change in velocity
(b) Change in velocity × time
(c) Change in velocity / time
(d) Change in velocity + time

Ans. : (c)

Q. 54 Everybody at rest has a tendency to remain in rest and a body in motion has a tendency to remain in motion is known as_____.

(a) Law of inertia
(b) Newton's second law of motion
(c) Newton's third law of motion
(d) retardation

Ans. : (a)

Q. 55 If motion of body takes place along the circumference of circle, then it is called as_____.

(a) Linear motion (b) Angular motion
(c) Gravitational motion (d) Projectile motion

Ans. : (b)

Q. 56 Angle subtended by radius vector when a particle is in circular motion moving from one positioned to other is called as_____.

(a) Angular Displacement
(b) displacement
(c) Angular velocity
(d) Angular acceleration

Ans. : (a)

Q. 57 SI unit of angular displacement is_____.

(a) Radian (b) Steradian
(c) Degree (d) None of these

Ans. : (a)

Q. 58 Unit of angular velocity is_____.

(a) s/radian (b) radian/s
(c) Radian-s (d) Degree/radian

Ans. : (b)

Q. 59 The rate of change of angular displacement w.r.t time is called as_____.

(a) Velocity
(b) Angular displacement
(c) Angular velocity
(d) Angular acceleration

Ans. : (c)

Q. 60 The rate of change of angular velocity w.r.t time is called as_____.

(a) Acceleration
(b) Angular displacement
(c) Angular velocity
(d) Angular acceleration

Ans. : (d)

Q. 61 The relation between angular velocity (w) and linear velocity (v) is given by_____.

(a) r = vw (b) v = rw

(c) w = vr (d) v = r + w

Ans. : (b)

Q. 62 If a particle execute circular motion then the angular displacement is equal to_____.

(a) $\pi/2$ radian (b) $3\pi / 2$ radian

(c) π radian (d) 2π radian

Ans. : (d)

Q. 63 1 r.p.s is equivalent to _____.

(a) 1/60 rpm (b) 60 rpm

(c) 1/3600 rpm (d) 3600 rpm

Ans. : (b)

Q. 64 A flywheel is rotating at 120 rpm. Its angular velocity will be_____.

(a) 2π radian /sec (b) 4π radian/sec

(c) $\pi/2$ radian /sec (d) $\pi/4$ radian/sec

Ans. : (b)

Q. 65 The second hand of the clock is 5cm long. The linear speed of ant sitting on tip will be_____.

(a) $\pi/2$ cm/s (b) $\pi/4$ cm/s

(c) $\pi/6$ cm/s (d) 2π cm/s

Ans. : (c)

Q. 66 Angular acceleration of a cycle is 4 radian/sec^2, where its wheel diameter is 60 cm. Its linear acceleration will be_____.

(a) 2.4 m/s^2 (b) 1.2 m/s^2

(c) 3.6 m/s^2 (d) 4.8 m/s^2

Ans. : (b)

Q. 67 Periodic time of angular motion is 3 sec. Its frequency will be_____.

(a) 2/3 Hz (b) 6 Hz

(c) 3 Hz (d) 1/3 Hz

Ans. : (d)

Q. 68 For every action there is equal and opposite reaction is known as_____.

(a) Newton's 1st law of motion

(b) Newton's 2nd law of motion

(c) Newton's 3rd law of motion

(d) None of these

Ans. : (c)

Q. 69 Newton's second law of motion states that rate of change of momentum of a body is proportional to and takes place in direction of _____.

(a) Velocity, force

(b) Force, velocity

(c) Displacement, velocity

(d) applied force, force

Ans. : (d)

Q. 70 Identify the application of Newton's 1st law of motion_____.

(a) Swimming (b) Use of seat belt in car

(c) Jumping (d) Rocket fire

Ans. : (b)

Q. 71 Which of the following is not an application of Newton's 1st law of motion?

(a) Pushing a car

(b) Use of seat belt in aeroplane

(c) Motion of simple pendulum

(d) Technique used in drop coin game

Ans. : (c)

Q. 72 Which of the following is an application of Newton's 2nd law of motion_____.

(a) To and Fro motion of pendulum

(b) jumping on earth

(c) while catching ball cricketer swing hands back

(d) Birds fly

Ans. : (c)

Q. 73 A bus moving at 72 km/hr come to rest in 20 sec. Find deceleration of bus_____.

(a) 1 m/s^2 (b) – 1 m/s^2

(c) 3.6 m/s^2 (d) – 3.6m/s^2

Ans. : (a)

Q. 74 A bullet of mass 50 gm is fired with velocity of 800 m/s from gun of mass 5 kg. The velocity with which gun recoil is_____.

(a) 8 cm/s (b) 8 mm/s

(c) 8 m/s (d) 80 m/s

Ans. : (b)

Q. 75 The angular velocity of hour hand of clock is_____.

(a) 1.453×10^{-4} rad/s (b) 14.53×10^{-5} rad/s

(c) Both a and b (d) 7.268×10^{-5} rad/s

Ans. : (c)

Q. 76 The second hand of clock is 20 cm long. The linear speed of ant sitting at the tip is_____.

(a) 0.200 m/s (b) 0.105 m/s

(c) 0.0209 m/s (d) None of above

Ans. : (c)

Q. 77 Rate of change of angular displacement with time is called as_____.

(a) Angular acceleration

(b) Linear acceleration

(c) Angular velocity

(d) Linear velocity

Ans. : (c)

Q. 78 SI unit of impulsive force is _____.

(a) Erg (b) Joule

(c) Dyne (d) Newton

Ans. : (d)

Q. 79 1 kg-m/sec =_____.

(a) 1 m-sec (b) 1 cm-sec

(c) 1 N-sec (d) 1 dyne-sec

Ans. : (c)

Q. 80 A scooter accelerate for 12 sec at the rate of 0.25 m/s^2. What will be it's final velocity, if it has initial velocity of 4 m/s?

(a) 48 m/s (b) 4 m/sec

(c) 1 m/s (d) 7 m/sec

Ans. : (d)

Q. 81 The branch of mechanics deals with the motion of the body is called_____

(a) Dynamics (b) Statics

(c) Kinetics (d) Kinematics

Ans. : (d)

Q. 82 When the velocity of body remains constant or uniform, its acceleration is_____.

(a) increasing (b) Decreasing

(c) Zero (d) None of the above

Ans. : (c)

Q. 83 The rate of change of velocity with respect to time is called_____.

(a) displacement (b) velocity

(c) acceleration (d) momentum

Ans. : (c)

Q. 84 RPM is SI unit of_____.

(a) Angular displacement

(b) Angular velocity

(c) Angular acceleration

(d) Liner velocity

Ans. : (b)

Q. 85 Motion of shafts, pulleys and flywheel are the examples of motion_____.

(a) Rectilinear (b) Angular

(c) Projectile (d) None of these

Ans. : (b)

Q. 86 A body rotating at 5 rad/s^2 accelerates to 90 rad.sec in 12 sec. Find the initial velocity of body_____.

(a) 90 rad/sec (b) 30 rad/sec

(c) 60 rad/sec (d) 180 rad/sec

Ans. : (b)

Q. 87 SI unit of angular acceleration is_____.

(a) Radian (b) Radian / sec

(c) Rad / sq.sec (d) M / sq.sec

Ans. : (c)

Q. 88 A force of 10 N acting on body of mass 500 gm causes its velocity to change from 5 m/sec to 10 m/sec. Find the change in momentum of body_____.

(a) 25000 gm-cm/sec (b) 0.25 kg -m/sec

(c) Both A and B (d) 25 kg-m/sec

Ans. : (c)

Q. 89 A car of mass 800 kg is moving with velocity of 36 km/hr. The momentum of the car is_____.

(a) 28800 kg-m/sec (b) 8000 kg-m/sec

(c) 8000000 kg-m/sec (d) 22.23 kg-m/sec

Ans. : (b)

Q. 90 The velocity of body of mass 500 gm changes from 40 m/sec to 20 m/sec. The impulse acting on body is_____.

(a) 10 kg-m/sec

(b) 10 kg-m/sec

(c) 100 kg-m/sec

(d) None of the above

Ans. : (a)

Q. 91 Which of the following is application of Newton's second law of motion?

(a) To and fro motion of pendulum

(b) While catching the ball, cricketer swings his hand back

(c) Jumping on earth

(d) Flying of birds

Ans. : (b)

Q. 92 Work is given by relation_____.

(a) W = force / displacement

(b) Force = work / Displacement

(c) W = Force + Displacement

(d) Work = Force × Displacement

Ans. : (d)

Q. 93 According to the law of conservation of energy, the total energy of system in various forms_____.

(a) Increases (b) Decreases

(c) Remains same (d) None of these

Ans. : (c)

Q. 94 The capacity of doing work is called as_____.

(a) Power (b) Energy

(c) Force (d) Displacement

Ans. : (b)

Q. 95 Power is defined as_____.

(a) Time per work done

(b) Amount of work done

(c) Rate of work done w.r.t time

(d) Work done per unit mass

Ans. : (c)

Q. 96 The water stored in a dam is an example of_____.

(a) Kinetic energy (b) Potential Energy

(c) Surface energy (d) Liquid energy

Ans. : (b)

Q. 97 Work is a quantity, power is a quantity_____.

(a) Scalar, scalar (b) scalar, vector

(c) Vector, vector (d) Vector, scalar

Ans. : (a)

Q. 98 SI unit of work done is_____.

(a) newton (b) dyne

(c) watt (d) joule

Ans. : (d)

Q. 99 SI unit of work Power is_____.

(a) newton (b) dyne

(c) watt (d) joule

Ans. : (c)

Q. 100 1watt is given by_____.

(a) 1J/1s (b) 1J × 1s

(c) 1s/1J (d) None of these

Ans. : (a)

Q. 101 Potential energy is stored form of energy and given by_____.

(a) P.E = mg/h (b) P.E = mgh

(c) P.E = h/mg (d) P.E = m/gh

Ans. : (b)

Q. 102 Kinetic energy is stored form of energy and given by_____.

(a) K.E = 2 mv^2 (b) K.E = 1/2 mv^2

(c) K.E = mv^2 (d) K.E = 1/2 mv

Ans. : (b)

Q. 103 Work energy principle states that work done by a system of forces acting on body between any two points is equal to_____.

(a) Change in P.E (b) Additions of K.E

(c) Change in K.E (d) Additions of P.E

Ans. : (c)

Q. 104 Work done = Change in K.E is_____.

(a) Gravitational law

(b) Watts equation

(c) Newton's 1st law of motion

(d) Work-energy principle

Ans. : (d)

Q. 105 Power is given by relation_____.

(a) Power = Force × velocity

(b) Power = Force/velocity

(c) Power = velocity/force

(d) None of these

Ans. : (a)

Q. 106 The force of 10 N applied on body produces displacement of 10 m, The work done will be_____.

(a) 10 J (b) 100 J

(c) 100 kJ (d) 200 J

Ans. : (b)

Q. 107 From law of conservation of energy, the total energy of system in various form_____.

(a) Varies (b) Remains constant

(c) Can't predict (d) None of the above

Ans. : (b)

Q. 108 Power = _____.

(a) Force × velocity (b) force / velocity

(c) velocity / force (d) Velocity + force

Ans. : (a)

Q. 109 The value of work done is negative if the angle between the force and displacement is_____.

(a) 0 (b) 90

(c) 45 (d) 180

Ans. : (d)

Q. 110 1000 liters of water is pumped to height of 50 m. The work done by the pump is (Take g = 9.8 m/sq.sec) _____.

(a) 9.8×10^5 J (b) 4.9×10^5 erg

(c) 4.9×10^5 J (d) 49×10^5 J

Ans. : (c)

Q. 111 A machine is able to lift a mass of 200 kg vertically up to a height of 30 m above the ground in 50 seconds. Power of the machine is (Assume $g = 10\ m/s^2$)_____.

(a) 1200 W (b) 1.2 kW

(c) Both A and B (d) 1200 kW

Ans. : (c)

Q. 112 Which of the following are the examples of potential energy?

(a) A scuba diver on the diving board

(b) A book resting on the table at certain height

(c) Both A and B

(d) A moving car

Ans. : (c)

Q. 113 If the bicycle of mass 15 kg moves at a speed of 50 m/s, find the kinetic energy of bicycle_____.

(a) 18750 J (b) 375 J

(c) 37500 J (d) 6000 J

Ans. : (a)

Q. 114 Water from a tank of capacity 1000 litres is to be lifted to a height of 40 m in 10 minutes. If the efficiency of pump is 80%. Calculate the power required to lift water if the tank is full. (Take $g = 10\ m/s^2$)_____.

(a) 407.6 Watt (b) 512.8 Watt

(c) 833.3 Watt (d) 911.7 Watt

Ans. : (c)

Q. 115 Which of the following is an example of kinetic energy?

(a) A moving car

(b) a charged particle in an electric field

(c) A stretched rubber band just released

(d) all of the above

Ans. : (d)

Q. 116 Projectile motion is defined as an object thrown in air making angle with horizontal_____..

(a) more than 90

(b) more than 0 and less than 90

(c) less than 0

(d) 180

Ans. : (b)

Q. 117 Which of the following is not an example of projectile motion?

(a) Football kicked in air

(b) Cricket ball as batsman hit six

(c) Javelin throw

(d) Motion of carom coin

Ans. : (d)

Q. 118 A stone is thrown by making an angle of 90 with horizontal, the path of stone is_____.

(a) Circular (b) Elliptical

(c) Linear (d) Parabolic

Ans. : (c)

Q. 119 Motion of a projectile is_____.

(a) One dimensional

(b) Two dimensional

(c) Three dimensional

(d) Four dimensional

Ans. : (b)

Q. 120 Trajectory is defined as traced by an object in projectile motion_____.

(a) Angle (b) horizontal line

(c) Height (d) path

Ans. : (d)

Q. 121 Angle of projection in projectile motion is given by_____.

(a) $\theta = \tan (4H/R)$ (b) $\theta = \tan^{-1} (4H/R)$

(c) $\theta = \tan (R/4H)$ (d) $\theta = \tan^{-1} (R/4H)$

Ans. : (b)

Q. 122 Total horizontal distance covered by projectile is called_____.

(a) Trajectory (b) Height of projectile

(c) Range of projectile (d) Time of flight

Ans. : (c)

Q. 123 A player kicks a ball at an angle e with the horizontal. The maximum horizontal range corresponds to angle of _____.

(a) 30 (b) 45

(c) 60 (d) 75

Ans. : (b)

Q. 124 A player kick a ball at an angle θ with horizontal. The maximum horizontal range corresponds to an angle of _____.

(a) 30 (b) 45

(c) 60 (d) 90

Ans. : (b)

Q. 125 Lofted shot hit by batsman covers maximum horizontal distance if the angle made by projectile path with horizontal is_____.

(a) 45 (b) 90 (c) 0 (d) 180

Ans. : (a)

Q. 126 The property of material body to regain its original dimensions after removal of deforming force is called as _____.

(a) plasticity (b) elasticity

(c) both are correct (d) both are wrong

Ans. : (b)

Q. 127 Young's modulus is the property of_____.

(a) liquid (b) gas

(c) solid (d) all of these

Ans. : (c)

Q. 128 When force is applied on a body, its size and shape changes such change is called as_____.

(a) deformation (b) formation

(c) elasticity (d) stress /strain

Ans. : (a)

Q. 129 Which of the following is plastic body?

(a) rubber (b) lead

(c) putty (d) both (a) and (c)

Ans. : (d)

Q. 130 A tension force of 2.5×10^{-4} m^2.The young's modulus of wire is_____.

(a) 10^9 N/m^2 (b) 10^{10} N/m^2

(c) 10^{11} N/m^2 (d) 10^{12} N/m^2

Ans. : (c)