Question QMC1 : A quantity which has both magnitude and direction is referred to a/an.
Answer:

Question QMC2 :
Answer:

Question QMC3 : The zero vector is denoted by.
Answer:

Question QMC4 :
Answer:

Question QMC5 :
Answer:

Question QMC6 :
Answer:

Question QMC7 :
Answer:

Question QMC8 :
Answer:

Question QMC9 :
Answer:

Question QMC10 :
Answer:

Question QMC11 :
Answer:

Question QMC12 :
Answer:

Question QMC13 :
Answer:

Question QMC14 :
Answer:

Question QMC15 :
Answer:

Question QMC16 : Temperature, gravitational potential or electric field are quantities known as _____.
Answer:

Question QMC17 :

Answer:

Question QMC18 : alt=""
width="469" height="38"/>

Answer:

Question QMC19 : alt=""
width="455" height="58"/>

Answer:

Question QMC20 : The divergence of a curl of a vector field A is equal
to _____.

Answer:

Question QMC21 : Stoke's theorem is written as.

Answer:

Question QMC22 : The condition for a force F to be conservative is.

Answer:

Question QMC23 : The Gauss theorem is written as.

Answer:

Question QMC24 : The integral theorem provide expressions for the
gradient, divergence and curl in terms of _____ co-ordinates.

Answer:

Question QMC25 : The _____ force equation determines the force on a
particle charge.

Answer:

Question QMC26 : For the static case, the Maxwell's equations separate
into a pair of _____ equations.

Answer:

Question QMC27 : Tensors are commonly denoted by _____capital
letters.

Answer:

Question QMC28 : I is the _____ tensor.

Answer:

Question QMC29 : The Kinetic energy of a rigid body is _____.

Answer:

Question QMC30 : alt=""
width="466" height="62"/>

Answer:

Question QMC31 : alt=""
width="460" height="55"/>

Answer:

Question QMC32 : alt=""
width="470" height="52"/>

Answer:

Question QMC33 : The continuous system of particles that occupy a
surface is defined as a _____ per unit area.

Answer:

Question QMC34 : If a particle moves freely in a space with 3
coordinates. Thus, the number of degree of freedom is _____.

Answer:

Question QMC35 : A particle moving on a given space curve has _____ number of degree of freedom.
Answer:

Question QMC36 : Six particles moving freely in a plane has _____ number of degrees of freedom.
Answer:

Question QMC37 : A system of particles consisting of 3 gram mass located at (91,0,-1), a 5 gram mass at (-2,1,3) and a 2 gram mass at (3,-1,1). The co-ordinate of the centre of mass are .
Answer:

Question QMC38 :
Answer:

Question QMC39 : If the resultant external force acting on a system of particles is _____, then the total momentum remains _____.
Answer:

Question QMC40 :
Answer:

Question QMC41 :
Answer:

Question QMC42 :
Answer:

Question QMC43 : The total _____ is equal to the change in linear momentum.
Answer:

Question QMC44 :
Answer:

Question QMC45 : A system of particles is in equilibrium if and only if the total virtual work of the actual force is.
Answer:

Question QMC46 :
Answer:

Question QMC47 : The rate of change of velocity with respect to time is called _____.
Answer:

Question QMC48 :
Answer:

Question QMC49 : In a simple harmonic oscillations, their restoring forces obey _____ of elasticity.
Answer:

Question QMC50 : Speed is a _____ quantity.

Answer:

Question QFB1 : A quantity which has both magnitude and direction is referred to a/an_____.

Answer: Vector

Question QFB2 : A quantity specified in magnitude alone is called a/an_____.

Answer: Scalar

Question QFB3 : A set of three mutually perpendicular vectors of unit length is called _____ triad.

Answer: Orthogonal

Question QFB4 : _____ are the three units vectors pointing in the direction of the x,y,z-axis respectively.

Answer: I,J,K

Question QFB5 :

Answer: Perpendicular

Question QFB6 : The limitations on a motion are called.........................

Answer: constraints

Question QFB7 : The vector product of a vector with itself is the _____ vector.

Answer: Zero

Question QFB8 : The vector product of two polar vectors is thus a/an _____ vector.

Answer: Axial

Question QFB9 : Velocity and Force are examples of _____ vectors.

Answer: Polar

Question QFB10 : Angular velocity is a/an_____ vector.

Answer: Axial

Question QFB11 : Temperature, gravitational potential or electric field are quantities known as _____.

Answer: Fields

Question QFB12 : A _____ field is a vector function<span style="position:relative"><span style="top:7pt">A(x,y,z)

Answer: Vector

Question QFB13 :

Answer: Laplacian

Question QFB14 : The divergence of a curl of a vector field A is equal to ____.

Answer: 0

Question QFB15 :

Answer: 0

Question QFB16 : The integral theorem provide expressions for the gradient, divergence and curl in terms of _____ co-ordinates.

Answer: Curvilinear

Question QFB17 : The basic equations of the electromagnetic theory are _____ equations.

Answer: Maxwell's

Question QFB18 : The _____ force equation determines the force on a particle charge.

Answer: Lorentz

Question QFB19 : For the static case, the Maxwell's equations separate into a pair of _____ equations.

Answer: Electrostatic

Question QFB20 : _____ occur most frequently when one vector b is defined as a linear function of another vector a.

Answer: Tensors

Question QFB21 : The first subscript labels the rows, and the second, the _____.

Answer: Columns

Question QFB22 : I is the _____ tensor.

Answer: Inertia

Question QFB23 : The tensor T is called _____,

Answer: Symmetric

Question QFB24 :

Answer: Anti-symmetric

Question QFB25 :

Answer: Unit

Question QFB26 : The _____ product of a and b is written as<span style="position:relative"><span style="top:3pt">T=ab

Answer: Tensor

Question QFB27 :

Answer: Eigenvector

Question QFB28 :

Answer: Eigenvalue

Question QFB29 :

Answer: Cubic

Question QFB30 : ____ are such that forces applied will change the distance between individual particles.

Answer: Deformable

Question QFB31 : The continuous system of particles that occupy a surface is defined as a _____ per unit area.

Answer: Surface density

Question QFB32 : The number of co-ordinates required to specify the position of a system of one or more particles is called the number of _____ of the system.

Answer: Degree of freedom

Question QFB33 : If a particle moves freely in a space with 3 coordinates. Thus, the number of degree of freedom is ____.

Answer: 3

Question QFB34 : ___ Co-ordinates are required to specify the position of a rigid body which can move freely in space with 6 degree of freedom.

Answer: 6

Question QFB35 : A system consisting of N particles moving freely in a space requires ____ co-ordinates to specify its position. Given that its number of degree of freedom is 3N.

Answer: 3N

Question QFB36 : Six particles moving freely in a plane has _____ number of degrees of freedom.

Answer: 12

Question QFB37 : Seven particles moving freely in a space has _____ number of degree of freedom.

Answer: 21

Question QFB38 : Two particles connected by a rigid rod moving freely in a plane has ____ degrees of freedom.

Answer: 3

Question QFB39 : If a system of particles is in a uniform gravitational field. The center of mass is sometimes called the _____.

Answer: Center of gravity

Question QFB40 : The _____ of a system of particles can be formed by multiplying the total mass M of the system by velocityof the center of mass.

Answer: Total momentum

Question QFB41 : If the resultant external force acting on a system of particles is<span lang="EN-IE"> constant, then the total momentum remains _____.

Answer: Zero

Question QFB42 :

Answer: Moment

Question QFB43 : If both the external and internal forces for a system of particles are conservative, then the principle of _____ of energy is valid.

Answer: Conservation

Question QFB44 :

Answer: Kinetic energy

Question QFB45 : The total _____ momentum of a system of particles about the centre of mass is zero.

Answer: Linear

Question QFB46 : The total _____ is equal to the change in linear momentum.

Answer: Linear impulse

Question QFB47 : A system of particles will be _____ equilibrium if the potential V is a minimum.

Answer: Stable

Question QFB48 : The rate of change of velocity with respect to time is called _____.

Answer: Acceleration

Question QFB49 : A mass m suspended from a light inextensible string of length l, such that the mass is free to swing from side to side in a vertical plane is known as _____.
Answer: Simple pendulum

Question QFB50 : In a simple harmonic oscillations, their restoring forces obey _____ of elasticity.
Answer: Hook's law