Physics ICS Part 1 Full Book Mcq's Online Test

Sr	Questions	Answers Choice
1	Vectors have	A. Numerical value B. Directional C. Both a and b D. None of these
2	Which is the example of vector quantity	A. Torque B. Speed C. Density D. Work
3	A vector is denoted by	A. Light face B. Bold face C. Both a and b D. None of these
4	Usually the x-axis is taken as	A. Vertical axis B. Horizontal axis C. +ve axis D. -ve axis
5	Direction of a vector in space requires	A. Two axis B. Three axis C. Four axis D. Both a and b
6	The angle between x-axis, y-axis and z-axis is	A. 45° B. 60° C. 75° D. 90°
7	Head to tail rule is used for	A. Addition of vectors B. Subtraction of vectors C. Multiplication of vectors D. Division of vectors
8	The subtraction of a vector is equivalent to the addition with	A. Same direction B. Perpendicular direction C. Reversed direction D. All of these
9	Question Image	
10	Question Image	A. Unit vector B. +ve of a vector C. Resultant vector D. -ve of a vector
11	The sum of two or more vectors will be a single vector called	A. Component vector B. Position vector C. -ve vector D. Resultant vector
12	The direction of null vector can be	A. (+) ve B. (-) ve C. Arbitrary D. Zero
13	Parallel vectors of same magnitude will be	A. Equal B. Opposite C. Both a and b D. None of these
14	The components of a vector which are perpendicular to each other are called	A. Horizontal components B. Vertical components C. Rectangular components D. All of these
15	When a vector is multiplied by a (-)ve number its direction	A. Remains constant B. Reversed C. Change by 90° D. None of these
16	In matter, the Atoms are in a state of never ending	A. Motion B. Rest C. Change

		D. State of decline
17	The motion and rest are	A. Absolute B. Relative C. Mutual D. All of these
18	The shortest distance between two points is called	A. Distance B. Amplitude C. Displacement D. Is a number
19	Rate of change of velocity is called	A. Speed B. Acceleration C. Displacement D. Torque
20	Rate of change of displacement is called	A. Speed B. Velocity C. Kinetic energy D. None of these
21	Average acceleration is a	A. Scalar quantity B. Vector quantity C. (-) ve quantity D. None of these
22	When the car moves with an increasing acceleration then its velocity time graph is always	A. Constant B. Variable C. A straight line D. A curve
23	The equations of motion hold good for	A. Variable acceleration B. Uniform acceleration C. Centripetal acceleration D. All of these
24	In the absence of air resistance the acceleration of a body will be	A. Uniform B. Variable C. Instantaneous D. None of these
25	Newton's laws of motion were published in	A. 1587 B. 1687 C. 1787 D. 1887
26	The mass of a body is quantitative measure of its	A. Motion B. Inertia C. Weight D. All of these
27	A frame of reference stationed at the earth is an	A. Inertial frame B. None internal frame C. Accelerated frame D. Laboratory frame
28	A force applied on a body produces acceleration in	A. Opposite direction B. perpendicular direction C. Its own direction D. In any direction
29	The action and reaction never act on	A. Same body B. Two bodies C. many bodies D. All of these
30	The time rate of change of momentum equals	A. Weight B. Applied force C. Impulse D. Mass
31	Total change in momentum of an isolated system is	A. Always (+) ve B. Always (-) ve C. Has maximum value D. Zero
32	A collision in which K.E. of the system is not conserved is	A. Elastic collision B. Inelastic collision C. 3rd low of motion D. None of these
33	Two quantities involved in work are	A. Force and speed B. Force and velocity C. Force and displacement D. Force and acceleration
		A. Scalar quantity B. Vector quantity

34	Work is a	D. Vector quantity C. Basic quantity D. None of these
35	When distance is plotted against the force, it is taken along	A. x-axis B. y-axis C. z-axis D. None of these
36	The SI unit of work is	A. Newton B. Joule C. Mol D. Calorie
37	The dimensions of work are	A. MLT⁻¹ B. MLT⁻² C. ML²T⁻² D. ML⁻¹T⁻¹
38	By increasing the amount of stretch in spring the force exerted will	A. Increase B. One watt C. One erg D. One joule
39	When the rocket moves away from the earth, the work against gravity	A. Remains constant B. Varies directly with distance C. Varies inversely with distance D. Varies inversely with square of distance
40	The space within which gravitational force acts on a body is called	A. Electric field B. Gravitational field C. Magnetic field D. Force field
41	The work done in gravitational field	A. Depend upon the path B. Does not depend upon the path C. (+)ve D. Zero
42	The frictional force is	A. Conservative force B. Non conservative force C. Electric force D. Magnetic force
43	The formula for the power is	A. P= W/d B. P=W/v C. P=W/t D. P=Wt
44	The SI unit of power is	A. Joule B. Newton C. Watt D. Kilowatt
45	1 KWh =	A. 3.6 x 10³K B. 3.6 x 10⁶K C. 3.6 x 10⁹J D. 3.6 x 10¹²J
46	The ability of a body to do work is called its	A. Force B. Power C. Capacity D. Energy
47	The unit of energy is same as that of	A. Power B. Work C. Torque D. Density
48	The tides raise in the sea roughly	A. Once a day B. Twice a day C. Three a day D. Four time a day
49	Salter's duck was invented by	A. Newton B. Einstein C. Prof Salter D. Maxwell
50	When a body is moving along a circular path, then such a motion is called	A. Vibratory motion B. Rotatory motion C. Linear motion D. None of these
51	Angular displacement is	A. Scalar quantity B. Vector quantity C. Basic quantity D. None of these

52	If the are of a circle equals its radius, then the angle subtended at the center will be	A. 1 degree B. One rotation C. One radian D. Half rotation
53	Question Image	
54	Time rate of change of angular displacement is called	A. Linear velocity B. Angular velocity C. Rotational velocity D. Vibrational velocity
55	Angular velocity determines, How fast or, How slow a body is	A. Accelerating B. Vibrating C. Rotating D. Oscillating
56	The angular acceleration a =	
57	The direction of angular acceleration is	A. Along the axis of rotation B. Perpendicular to the axis of rotation C. Opposite to axis of rotation D. None of these
58	The relation between linear and angular velocity is	
59	The equations of angular motion hold only in case when the axis of rotation is	A. Moving B. Fixed C. Both a and b D. None of these
60	The formula of centripetal acceleration is	
61	The angle between circumference of a circle and center is	
62	The moment of inertia is analogue to	A. Mass B. Weight C. Torque D. Force
63	The work done by centripetal force is	A. (-)ve B. (+)ve C. Maximum D. Zero
64	In case of planets centripetal force is provided by	A. Coulomb's force B. Electrostatic force C. Gravitational force D. Magnetic force
65	The orbital angular momentum is associated with the motion of a body along	A. Straight path B. Circular path C. Curved path D. Along any path
66	The artificial satellites are held in orbits by	A. Gravitational force B. Electric force C. Magnetic force D. All of these
67	The study of fluid dynamics is	A. Easy B. Complicated C. Impossible D. None of these
68	The law of conservation of mass gives us	A. Equation of continuity B. Stock's law C. Bernoulli's equation D. Viscosity
69	The law of conservation of energy gives us	A. Equation of continuity B. Stock's law C. Bernoulli's equation D. Viscosity
70	The frictional effect between the different layers of fluid is called	A. Terminal velocity B. Stock's law C. Viscosity D. Surface tension
71	Substances that don't flow easily has	A. Large co-efficient of viscosity B. Small co-efficient of viscosity C. Medium co-efficient of viscosity D. Zero-coefficient of viscosity
72	Viscosity is represented by Greek letter	

73	This is used for	A. Co-efficient of friction B. Co-efficient of expansion C. Co-efficient of viscosity D. Co-efficient of contraction
74	The drag force increases as the speed of object	A. Become zero B. Decreases C. Increases D. Remains constant
75	The terminal velocity can be obtained by using	A. Newton's law B. Stock's law C. Guass's law D. None of these
76	The flow of a fluid is of	A. One type B. Two types C. Three types D. Four type
77	The unsteady flow of a fluid is called	A. Stream line B. Turbulent flow C. Average flow D. Viscous flow
78	The regular or steady flow of fluid is called	A. Stream line B. Turbulent flow C. Average flow D. None of these
79	The product of cross sectional area of a pipe and speed of fluid along the pipe is	A. Zero B. Maximum C. Constant D. Variable
80	The SI unit of flow rate are	A. m-sec⁻² B. m³-sec⁻¹ C. m³-sec⁻² D. m-sec⁻³
81	$A_1b_1 = A_2b_2$represents	A. Stock's law B. Newton's law C. Equation of continuity D. Brenoulli's equation
82	Torricelli's theorem is given by	
83	Air blows from	A. High pressure to low pressure B. Low pressure to high pressure C. Low temperature to high temperature D. High temperature to low temperature
84	The to and fro motion of a body is called	A. Linear motion B. Rotational motion C. Vibratory motion D. None of these
85	The motion of a simple pendulum is the example of	A. Vibratory motion B. Rotatory motion C. Periodic motion D. Both a and c
86	The produce oscillation, body is pulled away from its	A. Mean position B. Extreme position C. Both a and b D. None of these
87	The acceleration produced by elastic restoring force is	A. Perpendicular to force B. Opposite to force C. In same direction as force D. Zero
88	In S.H.M, the acceleration of the body is directly proportional to	A. Weight of body B. Applied force C. Amplitude D. Displacement
89	When a body is vibrating its displacement from mean position	A. Remains constant B. Changes with time C. Become(-)ve D. None of these
		A. Displacement B. Time period

90	One complete round trip of a body is called	C. Vibration D. Frequency
91	Frequency 'f' and time period 'T' are related as	
92	Angular frequency is the characteristic of	A. Linear motion B. Vibratory motion C. Circular motion D. All of these
93	Question Image	
94	A swing is good example of	A. Resonance B. Vibration C. Time period D. Oscillation
95	Damping is the process in which energy	A. Increases B. Remains constant C. Dissipates D. None of these
96	Time period of simple pendulum depends upon	A. Mass of pendulum B. Weight of pendulum C. Length of pendulum D. Shape of pendulum
97	Second pendulum has a time period	A. 1 sec B. 3 sec C. 2 sec D. 4 sec
98	The frequency of 2nd pendulum is	A. 0.5 Hz B. 1 Hz C. 1.5 Hz D. 2 Hz
99	The amplitude of a vibrating body at resonance in vacuum is	A. Minimum B. Maximum C. Zero D. Infinite
100	P.E. of a spring is stored in	A. Spring B. mass C. Both of them D. None of these
101	Waves transport energy without transporting	A. Matter B. Force C. Momentum D. All of these
102	The mechanism of transports energy of all the waves is	A. Different B. Same C. Complicated D. Easy
103	In transverse waves the particles of medium vibrate	A. Along the direction of wave B. Opposite to direction of wave C. Perpendicular to direction of wave D. Slowly
104	An oscillating mass-spring system produces	A. Sound waves B. Electromagnetic waves C. Light waves D. Periodic waves
105	Question Image	
106	Which of the following is mechanical wave	A. Heat B. Light C. Sound D. None of these
107	The Newton's formula for the speed of sound in air is	
108	Who did give the correct formula for the speed of sound in air?	A. Boyle B. Laplace C. Newton D. Einstein
109	The experimental value for the velocity of sound in air is	A. 233 m-sec⁻¹ B. 333 m-sec⁻¹ C. 433 m-sec⁻¹ D. 533 m-sec⁻¹
110	The speed of sound increases with the increase of in	A. Pressure B. Volume

110	The speed of sound increases with the increase of in	C. Temperature D. Density
111	The distance between two consecutive crests of troughs is called	A. Time period B. Wave length C. Frequency D. Displacement
112	When the amplitude of a wave become double, its energy becomes	A. One half B. Two times C. Three times D. Four times
113	The distance between the consecutive nodes is	
114	When two waves having same frequency traveling in same direction combine, phenomenon is called	A. Wave motion B. Combination of waves C. Interference D. Diffraction
115	When two waves of same frequency travel in opposite direction, the phenomenon will be	A. Diffraction B. Stationary waves C. Polarization D. Interference
116	When ever the path difference between the waves is integral multiple of half the wavelength, interference will be	A. Constructive B. Destructive C. (-)ve D. (+) ve
117	In stationary waves, the particle velocity at nodes is	A. Minimum B. Maximum C. Zero D. Constant
118	Huygen's proposed, light energy travels in space from source in	A. 1578 B. 1678 C. 1778 D. 1868
119	Which of the following is evidence of wave nature of light	A. Interference B. Diffraction C. Polarization D. All of these
120	Young in 1801 performed experiment for the first time about	A. Interference B. Diffraction C. Polarization D. Particle nature of light
121	Light waves emitted from a source spread in	A. Specific direction B. All direction C. Upward direction D. None of these
122	In case of point source the shape of wave front is	A. Circular B. Spherical C. Elliptical D. Square
123	A ray of light is a line	A. Parallel to wave front B. Normal to wave front C. Anti-parallel to wave D. Any one of these
124	The distance between two consecutive wave front is equal to	A. One wave length B. Two wave length C. Half wave length D. Three wave length
125	Oil film floating on water exhibits colours due to	A. Interference B. Diffraction C. Polarization D. All of these
126	Bright fringes are also called as	A. Minima B. Maxima C. Wave front D. Ray of light
127	Dark fringes are also called as	A. Minima B. Maxima C. Wave front D. Ray of light
128	The centre of Newton's rings will be	A. Dark B. Bright C. Coloured

		D. Not visible
129	Standard metal according to Michelson's interferometer is equivalent to	A. 1553163.5 wave meter B. 3 x 108meter C. 15503000 meter D. None of these
130	In young's double slit experiment for the interference the central region will be	A. Dark B. Bright C. Coloured D. None of these
131	The property of bending of light around obstacles is	A. Interference B. Diffraction C. Polarization D. Superposition
132	The Bragg's equation is given by	
133	Interplaner distance can be determined by	A. Newton's rings B. Bragg's law C. Diffraction pattern D. Interferometer
134	According to Huygen's principle the points on primary wave front can be considered as	A. Secondary wavelets B. Ray of light C. Source of light D. None of these
135	The minimum distance from eye at which an object appears to be distinct is	A. Near point B. Focal length C. Image distance from lens D. Object distance from lens
136	The location of near point changes with	A. Age B. Size of the eye C. Sharpness of the eye D. None of these
137	The ratio of size of image and size of object is	A. Focal length B. Magnification C. Resolving power D. Principle focus
138	The magnifying power is also called	A. Resolving power B. Angular magnification C. Strength of eye D. None of these
139	A convex lens can be used as	A. Simple microscope B. Compound microscope C. Telescope D. Spectrometer
140	More details of an object can be seen with a microscope by using	A. Green light B. Red light C. Yellow light D. Blue light
141	The diameter of a lens is called	A. Focal length B. Aperture C. Principle axis D. Centre
142	The focal length of a concave lens is always	A. +ve B. -ve C. Zero D. None of these
143	Image formed by a concave lens is	A. Real B. Virtual C. Erect D. None of these
144	The device used to study the spectra from different sources of light is	A. Telescope B. Optical fibre C. Spectrometer D. Microscope
145	The speed of light was measured correctly by	A. Galileo B. Michelson C. Newton D. Maxwell
146	The accepted value for speed of light in vacuum	A. 2.99 x 10⁸m - sec⁻¹ B. 2.99 x 10⁶m - sec⁻¹ C. 2.99 x 10⁸km -

		sec⁻¹ D. 2.99 x 10⁸m - h⁻¹
147	Total confined light is obtained by	A. Total internal reflection B. Refraction of light C. Diffraction D. Polarization
148	The types of optical fibres are	A. Three B. Four C. Five D. Six
149	Multimode step index fibre is useful for	A. Long distances B. Short distances C. Better quality D. Low price
150	A double convex lens acts as diverging lens when the object is	A. At infinity B. Inside the focus C. A way from focus D. A a large distance from lens
151	The optical fibre is covered for protection by	A. Glass jacket B. Plastic jacket C. Steel jacket D. Diamond jacket
152	Transformation of heat other forms of energy is discussed in	A. Thermal physics B. Thermodynamics C. Atomic physics D. Nuclear physics
153	Almost all the raw energy is librated from	A. Heat B. Earth C. Light D. All of these
154	The behaviour of gases is discussed by	A. Knowing their nature B. Knowing their temperature C. Kinetic theory D. Maxwell's theory
155	A finite volume of gas consists of	A. Small no. of molecules B. Large no. of molecule C. Average no. of molecule D. None of these
156	Size of the molecules is much smaller as compared to the	A. Mass of the molecules B. Distance between the molecules C. Density of the molecules D. Volume of the molecules
157	The motion of gas molecules is	A. In the same direction B. Random C. Walls of container D. Opposite to each other
158	The collision between the gas molecules is	A. Elastic B. Inelastic C. Both a and b D. None of these
159	Mercury is used as a thermometric substance because	A. It is opaque B. Does not stick to glass C. Has low specific heat D. All of these
160	The temperature of human body on Kelvin scale is	A. 210K B. 310K C. 410K D. 510K
161	Pressure 'P' of a gas is defined as	A. F/A B. FA C. F/V D. F/D
162	The kinetic energy of molecules of an ideal gas at absolute zero is	A. Very low B. Very high C. Zero D. First increases then decreases
163	The molecules of an ideal gas exert	A. Force on each other B. No force on each other C. Large force on each other D. Pressure on each other

164	First law of thermodynamics can be defined by the equation	
165	Which of following is irreversible process	A. Slow compression of an elastic spring B. Slow evaporation of substances in isolated vessel C. Slow expansion of a gas D. A chemical explosion E.
166	The unit o pressure of gas is	A. Nm⁻² B. Pascal C. Atmosphere D. All of these
167	The efficiency of any heat engine can never be	A. +ve B. 100% C. -ve D. None of these
168	The energy processes, we use are	A. Efficient B. Not efficient C. Reversible D. None of these
169	What would encourage trade between two countries	A. Different tax system B. Frontier checks C. National currencies D. reduced tariffs
170	Name the quantity which is a vector.	A. Speed B. Force C. Temperature D. Density
171	The direction of vector in space is specified by	A. 1- angle B. 2- angle C. 3- angle D. 4 - angle
172	The resultant of two forces 30 N and 40 N acting parallel to each other is.	A. 30 N B. 40 N C. 70 N D. 10 N
173	The resultant of two vectors having magnitude 12 N and 8 N can not be	A. 2 N B. 20 N C. 10 N D. 16 N
174	A force of 100 N makes on angle of $60^{o}$with y axis, its horizontal component is.	A. 50 N B. 60 N C. 70.7 N D. 86.6 N
175	A force of 100 N makes an angle of 60o with Y- Axis, its horizontal component is.	A. 50 N B. 60 N C. 70.7 N D. 86.6 N
176	Minimum number of unequal forces whose vector sum can be zero are.	A. 5 B. 4 C. 3 D. 2
177	The magnitude of A will be	A. Zero B. A² C. 1 D. A
178	A force of 10N makes an angle 30o with y axis. Then magnitude of x -component is.	A. 5 N B. 8.66 N C. 10 N D. Zero
179	Vector has both of its components are negative lies in	A. 1st quadrant B. 2nd quadrant C. 3rd quadrant D. 4th quadrant
180	The resultant of two forces 3N and 4 N acting at right angle to each other is.	A. 5 N B. 6 N C. 1 N D. 7 N
181	The resultant of two vectors having magnitude 10 N and 8 N Can not be	A. 2 N B. 9 N C. 18 N

		D. 20 N
182	If a vector of magnitude 10 N along y-axis then its component along x-axis is	A. 0 N B. 5 N C. 8.66 N D. 10 N
183	Two vector can be added by simple arithmetical method when they are at an angle of.	A. 120^o B. 90^o C. 0^o D. 45^o
184	Maximum number of components of a vector may be	A. Infinite B. One C. two D. three
185	The resultant of two forces 3 N and 4 N acting at right angle to each other is	A. 7 N B. 5 N C. 4 N D. 1 N
186	Force 12 N and 5 N are add, the resultant con not be	A. 13 N B. 6 N C. 7 N D. 17 N
187	Dot product of two non zero vectors is zero it angle between them is.	A. 30^o B. 60^o C. 45^o D. 90^o
188	Dot product of vector with itself is.	A. Zero B. 2 A C. A² D. A
189	The force and torque are analogous to	A. Velocity B. Mass and weight C. Moment of Inertia D. Each other
190	If r = 5 m and f = 4 N are along same direction, them torque is	A. 20 Nm B. 5 Nm C. 10 Nm D. Zero
191	A direction of torque is	A. Along the position vector r B. Perpendicular to both r and f C. Along the direction of force F D. Opposite to the direction of r
192	When a fore of 100 N is acting on an object along x-axis then its vertical component will be.	A. 50 N B. 0 N C. 25 N D. 10 N
193	The dot product of two vectors A and B will be zero, if angle between A and B is	A. Zero B. 30^o C. 90^o D. 180^o
194	the shortest distance between two points is called.	A. Speed B. Acceleration C. Distance D. Displacement
195	When average velocity becomes equal to instantaneous than body is called moving with.	A. Instantaneous acceleration B. Constant acceleration C. Constant velocity D. Variable velocity
196	when a ball is throng straight up, the acceleration at its highest point is.	A. Upward B. Down ward C. Zero D. Horizontal
197	Unit of acceleration is	A. ms-1 B. ms C. ms-2 D. m2s
198	If a mass of a body is doubled, then acceleration becomes.	A. Double B. Half C. One fourth D. Constant
199	A parateaper moves downward with	A. Zero acceleration B. Constant acceleration

199	A paratooper moves downward with	C. Positive acceleration D. Negative acceleration
200	A body covers a distance of 10 m in 1 sec with a constant velocity of 10 ms-1 , Acceleration produced by the body is.	A. 0 ms-1 B. 2 ms-2 C. 5 ms-2 D. 10 ms-2
201	10 N and 20 N are acting on a body of mass 2 kg the minimum acceleration will be.	A. 10 ms-2 B. 20 ms-2 C. 60 ms-2 D. 5 ms-2
202	Slope of velocity time graph describes a physical quantity called.	A. Displacement B. Average velocity C. Average acceleration D. Momentum
203	The slope of velocity time graph shows	A. Total distance covered B. Average acceleration C. Instantaneous acceleration D. Torque
204	If the slope of a velocity time graph gradually decreases than body is said to be moving with	A. Positive acceleration B. Negative acceleration C. Uniform velocity D. None
205	When the body moves with constant acceleration the velocity time graph is	A. Parabola B. Hyperbola C. Straight line D. Curve
206	The area between velocity time graph and the time axis is numerically equal to.	A. ?Speed of object B. Distance covered by the object C. Average velocity of the object D. Acceleration of the object.
207	If velocity time graph is parallel to time axis, then acceleration of moving body will be.	A. Maximum B. Positive C. Zero D. Negative
208	If the slope of the velocity time graph remain constant then body is moving with.	A. Uniform velocity B. Negative variable acceleration C. Variable acceleration D. Uniform acceleration
209	When velocity time graph is a straight line parallel to time axis then	A. Velocity is zero B. Acceleration is constant C. Acceleration is zero D. Velocity is variable
210	A bullet shot straight up, return to its starting point in 10 sec. Its initial speed was	A. 9.8 ms-1 B. 24.5 ms-1 C. 49 ms-1 D. 98 ms-1
211	Distance covered by a freely falling body is 2 seconds will be	A. 9.8 m B. 19.6 m C. 44.4 m D. 49 m
212	A ball is thrown up vertically, it takes 3 sec to reach maximum height. Its initial velocity is.	A. 10 ms-1 B. 12.2 ms-1 C. 15 ms-1 D. 29.4 ms-1
213	A mass of 1 kg is freely falling. The force of gravity is.	A. 1 N B. 9.8 N C. 0.5 N D. Zero
214	The mass of an object is quantitative measure 0 its	A. Momentum B. Acceleration C. Inertia D. Energy
215	An object of mass 1 kg moving with acceleration 0 1 ms-2 will experience a force of.	A. 10⁻² N B. 10⁻³ N C. 1 N D. 1 dyne
216	The velocity of a free falling body just before Hattin the ground is 9.8 ms-1, the height through which is fall be	A. 98 m B. 19.6 m C. 4.9 m D. 9.8 m

217	Inertia may expressed in	A. Kg B. Newton C. Watt D. Joule
218	No body begins to move or comes to rest of itself was given by	A. Newton B. Pascal C. Bernoulli D. Bu Ali Sina
219	A man of 5000 kg moves with an acceralation of 1 ms-2 force acting on it is.	A. 5 N B. 500 N C. 50 N D. 5000 N
220	Kg ms-1 can also be written as	A. Nm B. Ns C. Ns-1 D. Js
221	The rate of change of momentum is equal to	A. Impulse B. Torque C. Velocity D. Force
222	Change of momentum is equal to	A. Force B. Tension C. Impulse D. Pressure
223	The dimensional unit of impulse is.	A. [MLT] B. [MLT-1] C. [ML-1T-1] D. [M-1L-1T-1]
224	Unit of impulse is equivalent to that of.	A. Force B. Momentum C. Acceleration D. Velocity
225	At what speed the momentum and kinetic energy of a body having the same.	A. 1 ms-1 B. 2 ms-1 C. 4 ms-1 D. 8 ms-1
226	In the absence of external force, the change in momentum is.	A. Zero B. Constant C. Decreasing D. Increasing
227	When speed of a body is doubled then its	A. K.E. is doubled B. P.E. is doubled C. Acceleration of doubled D. Momentum is doubled
228	A force of 10 N acts on a body of mass 5 kg in one second. The change in its momentum will be.	A. 10 kgms-1 B. 50 kg ms-1 C. 2 kg ms-1 D. 20 kg ms-1
229	A force of 20 N acts along x axis, tis component is.	A. 0 N B. 10 N C. 20 N D. 30 N
230	Before the launch of a rocket the mass of fuel of the rocket is approximately consists of.	A. 60% B. 50% C. 80% D. 100%
231	A typical rocket consumes fuel about	A. 40000 Kgs-1 B. 30000 Kgs-1 C. 20000 Kg s-1 D. 10000 Kgs-1
232	For a rocket , the change in momentum per second of the ejecting gases is equal.	A. Acceleration of the rocket B. Momentum of rocket C. Velocity of rocket D. Thrust acting on rocket
233	Motion of projective is	A. One dimensional B. Two dimensional C. Three dimensional D. Four dimensional
234	When the projectile reaches the highest point of trajectory, the vertical component of velocity becomes.	A. Small B. Zero C. Maximum

		D. $v_i \cos$
235	The velocity of a projectile is maximum	A. At the highest point B. At point of launching and just before striking the ground C. At half of the height D. After striking the ground
236	Horizontal range is maximum when the angle of projectile is.	A. 0 o B. 30 o C. 45 o D. 60 o
237	An athlete runs with a speed of 12 ms-1. Determine the longest jump he can undertake.	A. 12 m B. 14.4 m C. 24 m D. 16.2 m
238	The horizontal component of velocity of projectile	A. Increases B. Decreases C. Remain same D. Decreases and then increases
239	The ballistic missiles are used only for	A. Long range B. Short range C. Medium range D. Constant range
240	The angle of projection for which its maximum height and horizontal range are equal	A. 46 ^o B. 56^o C. 66^o D. 76^o
241	The trajectory of a projectile is.	A. Circle B. Parabola C. Hyperbola D. Straight line
242	The shape of trajectory of short range projectile is	A. Straight line B. Circle C. Elliptical D. Parabolic
243	The path followed by a projectile in known as its	A. Range B. Trajectory C. Cycle D. Height
244	For maximum range the angle of projection must be	A. 30^o B. 45^o C. 60^o D. 90^o
245	A ball is thrown up with 20 ms-1 at an angle of 60 ^{o}with x-axis , the velocity of the ball at the top position is.	A. 0 ms-1 B. 10 ms-1 C. 20 ms-1 D. 16 ms-1
246	Height of projectile is maximum at an angle of.	A. 45^o B. 60^o C. 30^o D. 90^o
247	The horizontal range of a projectile of 30^{o}with horizontal is same at an angle.	A. 40^o B. 45^o C. 90^o D. 60^o
248	The acceleration of a projectile along x axis is.	A. Zero B. Increase C. Decrease D. Equal to 'g'
249	the acceleration along x -axis direction in case of projectile is.	A. Zero B. Equal to gravity C. Maximum D. Constant
250	The maximum range of projectile is 100 km, Take 9=10 ms-2, the initial velocity of the projectile will be.	A. 1000 kms-1 B. 1 kms-1 C. 10 kms-1 D. 100 kms-1
251	If the initial velocity of a projectile becomes doubled, the time of fight will be.	A. Same B. 4 times C. Double D. 3 times
		A. Torque

252	Work has dimension lime	B. Momentum C. Velocity D. Power
253	Work is negative when angle between F and d is	A. 45^o B. ₀^o C. 90^o D. 180^o
254	The dimensions of work are.	A. [MLT-1] B. [MLT-2] C. [ML2T-2] D. [MLT]
255	The unit of work in base unit is	A. Kg m-1 sec-2 B. Kgm sec-2 C. Kgm2 sec-1 D. Kgm-1 sec-1
256	SI unit of work	A. Newton B. Walt C. Pascal D. Joule
257	The work done will be maximum when angle between F and d.	A. 180^o B. 0^o C. 90^o D. 60^o
258	If a body of mass 5 kg is raised vertically through a distance of 1 m, then work done is.	A. 49 J B. 4.9 J C. 490 J D. 0.49 J
259	Kilo watt hour is the unit of	A. Power B. Energy C. Force D. Torque
260	The commercial unit of electric energy is	A. Kilo watt hour B. watt C. Watt hour D. Kilo Watt
261	3 Joules of work id done is 3 seconds, then power	A. 6 Watt B. 1 Watt C. 3 Watt D. 2 Watt
262	A body of mass 2 kg moving with velocity of 4 ms-1 has K.E. equal to.	A. 16 J B. 8 J C. 32 J D. 2 J
263	Identity the non conservative force among the following.	A. Frictional force B. Electrical force C. Gravitational force D. Elastic restoring force
264	The power needed to lift a mass of 5000 g to height of 1 m in 2 secnd is	A. 2.45 watt B. 24.5 watt C. 245 watt D. 2.45 watt
265	The dimension of power is	A. MLT-1 B. ML2T-2 C. ML2T2 D. ML2T-3
266	Watt -m2 is the unit of	A. Energy B. Intensity C. Power D. Work
267	Which one is a conservative force	A. Elastic spring force B. Air resistance C. Frictional force D. Tension in the spring
268	If velocity 'v' of an object is double, then K.E. because.	A. Remain same B. Sixteen times C. Double D. Four times
269	The K.E. of bullet of mass 500 gm moving at a speed of 200 ms-1	A. 250 J B. 125 J C. 2500 J D. 10,000 J

270	A body of mass 1.0 Kg dropped from the top of a tower of highest 50 m, what will be its K.E. 10 m below the top	A. 400 J B. 490 J C. 49 J D. 98 J
271	Energy dissipated usually appears as	A. P.E. B. Heat Energy C. Chemical energy D. Nuclear Energy
272	A body has P.E. = mgh, when it is at height 'h' from the ground. At the point at the distance 'x' below from the top its P.E. with	A. mgh B. mgx C. mg(x-h) D. None of these
273	Original source of energy for biomass is	A. Earth B. Star C. Moon D. Sun
274	Which one is renewable source of energy.	A. Coal B. Uranium C. Biomass D. Natural gas
275	Biomas is a potential source of	A. Renewable energy B. Non renewable energy C. Botha a and b D. Tidal energy
276	Which one is non renewable source of energy.	A. Hydro electric B. Bio mass C. Tides D. Oil
277	The value of solar constant.	A. 1.4 kW m-2 B. 1.0 kW m-2 C. 1.6 kW m-2 D. 2 kw m-2
278	The unit of solar light inversely is	A. Watt B. kW m-2 C. Watt m-2 D. 1 m2
279	A layer of rock holding water that allows water to percolate through it with pressure is called.	A. Geyeser B. Aquifer C. Stem vent D. Hot spring
280	Bio mass is converted into fuel by	A. Evaporation B. Fermentation C. Reflection D. Scattering
281	Hot igneous rocks, usually in molten or partly molten state are found in the depth of	A. 5 km B. 10 km C. 15 km D. 20 km
282	_____ is bio fuel	A. Water B. Petrol C. Ethanol D. Oil
283	The motion of a body moving along a circular path is called.	A. Translational motion B. Angular motion C. Vibratory motion D. Linear motion
284	One radian is equal to.	A. 75.3^o B. 57.3^o C. 35.7^o D. 73.3^o
285	Pi radian is equal to.	A. 0^o B. 90^o C. 180^o D. 57.3^o
286	One revolution is equal to.	A. 90^o B. 180^o C. 360^o D. 270^o
287	100 radians are equal to.	A. 57.3^o B. 75.3^o C. 573^o

		D. 5730^o
288	The SI unit of angular displacement is.	A. Degree B. Revolution C. Radian D. Rotation
289	All point of the rigid body rotating about a fixed axis do not have same.	A. Angular acceleration B. Angular speed C. speed D. Angular displacement
290	Which quantity of the following is dimensionless.	A. Angular velocity B. Centripetal force C. Angular acceleration D. Angular displacement
291	2 radian = ____	A. 2 m B. 4 m C. 57.3 m D. 114.6 m
292	A wheel of radius 50 cm having an angular speed of a rad /s have linear speed.	A. 1.5 m/s B. 3.5 m/s C. 2.5 m/s D. 4.5 m/s
293	The dimensions of angular velocity are	A. [LT-1] B. [LT-2] C. [T-1] D. [L-1T-1]
294	The direction of angular velocity of along the	A. Tangent at that point B. Axis of rotation C. Radius towards the centre D. Radius away from the centre
295	When a particle is moving along a circular path its projection along the diameter executes	A. Linear motion B. Vibratory motion C. Rotatory motion D. SHM
296	The direction of angular velocity is determined.	A. Left hands rule B. Head to tail rule C. Right hand rule D. General rule
297	The time rate of change of angular displacements called.	A. Linear velocity B. Linear speed C. Angular velocity D. Angular speed
298	If a body is moving in the counter clockwise direction the direction of angular velocity will be	A. Toward the centre B. Away from the centre C. along the linear velocity D. Perpendicular to both radius and linear velocity
299	Angular acceleration is produced by	A. Power B. Torque C. Pressure D. Force
300	The rate of change of angular velocity is called	A. Angular velocity B. Angular acceleration C. Angular displacement D. Angular speed
301	Direction of angular acceleration is always along	A. x-axis B. y -axis C. z-axis D. The axis of rotation
302	A body starting from rest attains angular acceleration of 5 rad s-2 in 2 second final angular velocity will be.	A. 10 rad s-1 B. 7 rad s-1 C. 3 rad s-1 D. 2 rad s-1
303	When a body moves in circular motion, the angle between linear and angular velocity is.	A. 180^o B. 90^o C. 60^o D. 75.3^o
304	A body rotating with angular velocity of 2 radian/s and linear velocity is also 2 ms-1, then radius of circle is.	A. 1 m B. 0.5 m C. 4 m D. 2 m

305	When a body is whirled in a horizontal circle by means of string, the centripetal force is supplied by	A. Mass of body B. Velocity of a body C. Tension in the string D. Centripetal acceleration
306	Centripetal force perform	A. Maximum work B. Minimum work C. Negative work D. No work
307	The centripetal force is always directed	A. Away from the centre along the radius B. Along the direction of motion C. Opposite to the motion of the body D. Towards the centre along the radius
308	Which one of the following is into directed along the axis of rotation	A. Angular acceleration B. Angular momentum C. Centripetal acceleration D. Angular displacement
309	Which one of the following force cannot do any work on the particle on which it acts.	A. Fractional force B. Gravitational force C. Electrostatic force D. Centripetal force
310	Which of the following is not directed along the fixed axis of rotation.	A. Angular displacement B. Angular momentum C. Centripetal acceleration D. Angular acceleration
311	If a body revolves under centripetal force its angular acceleration is	A. Non zero B. Variable C. Increasing D. Zero
312	the angular version of F= ma is	A. L = 1w B. pi = 1a C. I = pi a D. f = mv/t
313	Moment of inertia is measure din	A. Kg m2 B. Kg m-2 C. Rad s-1 D. Joule second
314	The diver spin faster when moment of inertia becomes.	A. smaller B. Greater C. Constant D. Equal
315	In rotational motion the analogous of mass is	A. Angular acceleration B. Torque C. Moment of inertia D. Angular momentum
316	The SI unit of angular momentum is	A. J.S-2 B. J.S-1 C. J.S D. J.m
317	For angular momentum of system to remain constant, external torque should be.	A. Small B. Large C. Zero D. None
318	The value of angular momentum is maximum when 0 is	A. 90^o B. 60^o C. 75^o D. 45^o
319	The product of rotational inertial 'I' and angular velocity ' w' is equal to.	A. Torque B. Linear momentum C. Angular momentum D. Force
320	In rotational motion the torque is equal to rate of change of	A. Angular velocity B. Linear momentum C. Angular momentum D. Angular acceleration
321	Angular momentum has the same unit as	A. Impulse x distance B. Power x time C. Linear x time D. work x frequency
322	The amount of inertia of 10 kg hoop about the axis of rotation perpendicular to its plane	A. 50 kgm2 B. 100 K gm2

322	having radius 5 m is	C. 150 K gm2 D. 250 K gm2
323	The diver spins faster when moment of inertia becomes.	A. smaller B. Greater C. Constant D. Zero
324	The relation between the speed and hoop can be written as	A. 2 B. 4 C. 1/2 D. 1/4
325	The unit of rotational K.E. is	A. rAD/SEC B. Js C. J D. Kgm2
326	Close orbiting satellites orbit the earth at a height of about	A. 400 km B. 4000 km C. 400 m D. 400 cm
327	Which is unimportant in describing the satellites orbit.	A. Distance of satellite from earth's center B. Gravitational constant G C. Mass of satellite D. Mass of earth
328	Satellites are the objects that orbit around the	A. Moon B. Sun C. Earth D. Star
329	The maximum velocity necessary to put a satellite into orbit is	A. 7.1 kms-1 B. 7.3 kms-1 C. 7.9 kms-1 D. 8,9 kms-1
330	The value of a time period of allow flying satellite is	A. 1 year B. 84 minutes C. 28 hours D. 1 day
331	The value of of 'g' at the centre of the earth is	A. Infinite B. 2 g C. 3 g D. zero
332	A man of mass 5 kg is falling freely, the fore acting on it will be	A. 5 N B. 9.8 N C. 19.6 N D. 49 N
333	Weight of a 60 kg man in moving elevator with constant acceleration of 1/2 f	A. Zero B. 300 N C. 600 N D. 200 N
334	Apparent weight of a man is in upward accelerated lift will	A. Increases B. Decreases C. Remain same D. Increases then decrees
335	The weight of the body at the centre of earth is	A. Maximum B. Minimum C. Zero D. Infinite
336	A man of 1 kg is freefalling. The force of gravity is	A. 1 N B. 9.8 N C. 0.5 N D. Zero
337	If a rocket is accelerating upward with an acceleration of 2 g, an astronaut of weight, mg in the rocket shows apparent weight.	A. Zero B. Mg C. 2 mg D. 3 mg
338	A 60 kg man in an elevator is moving upward with an acceleration of 9.8 ms-2. The apparent weight of the man.	A. Increase B. Decreases C. Remain constant D. Becomes zero
339	An elevator is moving up with an acceleration equal to 'g' An apparent weight of the body in an elevator is.	A. Zero B. Equal to real weight C. 2 mg D. 3 mg

340	The weight of an object an elevator moving down with an acceleration of 9.8 m/s2 will becomes	A. Half B. Double C. Unchanged D. Zero
341	A man weight 1000 N in a stationary lift. If the lift moves up with an acceleration of 10 ms-2. then its weight becomes.	A. 1000 N B. 2000 N C. 3000 N D. 0 N
342	Artificial gravity can be created in the space ship by	A. Revolving around the earth B. Spinning around its own axis C. Increasing its velocity D. Decreasing it svelocity
343	the height of the geostationary satellite above the equator is.	A. 35000 km B. 36000 km C. 34000 km D. 33000 km
344	Height of geo stationary orbit of the satellite above the earth is.	A. 300 km B. 250 km C. 400 km D. None of these
345	As we go from pole to equator of earth, the value of 'g'	A. Increase B. Decrease C. Remain constant D. Zero
346	The minimum number of correctly positioned communication satellites to cover whole populated earth is.	A. 2 B. 3 C. 100 D. 200
347	The largest satellite system is managed by	A. 116 countries B. 126 countries C. 136 countries D. 140 countries
348	INTELSAT VI satellite operates at microwave frequencies of.	A. 2,4,6,10 GHz B. 4,6,11 and 14 MHz C. 4,6,11 and 14 GHz D. 2,4,6 AND 14 GHz
349	International Telecommunication satellite	A. 4,6,8 and 10 Hz B. 4,6,11 and 14 GHz C. 4,6,8 and 12 Hz D. 4,8,11 and 16 GHz
350	Time period of geostationary satellite of radius 'R' is	A. 1 hour B. 48 min C. 1 day D. 1 month
351	A communication satellite is used ot reflect the signal of.	A. Microwaves B. Radio waves C. y rays D. x -rays
352	How many orbiting satellites from the Global positing system.	A. 3 B. 12 C. 24 D. 22
353	Einstein's theory gives us the physical picture of how the	A. Body moves B. Gravity works C. Moment of inertia produced D. Weightlessness creates
354	The law of conservation of mass gives.	A. Beronoulli's B. Venturi relation C. Torricelli's theorem D. Equation of continuity
355	Which material has maximum viscosity	A. Glycerin B. Plasma C. Methanol D. Water
356	Stoke's law holds for bodies having.	A. Spherical shape B. Oblong shape C. Rectangular shape D. All shapes
357	The unit of co efficient of viscosity in S.I system	A. Kg -1 ms-1 B. Kg m-1 s-1 C. kg -1 m-1

		C. Kg m-1 D. Kg ms-1
358	The dimension of viscosity are	A. [M2L-2T2] B. [M-1LT-1] C. [M-1L-1T] D. [ML-1T-1]
359	If the radius of droplet becomes half, then its terminal velocity will become.	A. Double B. Half C. One fourth D. Remains same
360	The terminal velocity of a droplet falling down under gravity is directly proportional to the square of	A. Its density B. Its radius C. Its viscosity D. Its elasticity
361	When body acquires terminal velocity them its acceleration 'a' becomes.	A. a = 0 B. a = g C. a > 0 D. a < 0
362	The word Fluid means	A. To rise B. To fall C. To flow D. To oppose
363	A fog droplets are in freely falling condition,. the ratio of their radii is 2:3, the ratio of their terminal velocities will be.	A. 2:3 B. 4:6 C. 4:9 D. 9:4
364	The SI units of flow rate are.	A. m2s-1 B. m3s-2 C. m3s-1 D. m2s-2
365	If the stream lines of fluid are forced closer together then.	A. Speed of the fluid increases B. Speed of the fluid decreases C. Pressure of the fluid increases D. Speed of the fluid remain same
366	The fluid is said to be incompressible, if its density is.	A. Zero B. Very high C. Constant D. Very small
367	When water falls from tap, its cross sectional area decrease due to.	A. Decrease of speed B. Increase of speed C. Air pressure D. Gravity increase
368	The ratio of the velocities of wate in a pipe lying horizontally at two ends is 1 : 4 The ratio of diameters of pipe at these two ends is.	A. 1 : 2 B. 2 : 1 C. 1 : 4 D. 4 : 1
369	Let A = Area of cross section of pipe, v = speed of fluid, then 'Av' is called.	A. Volume flow rate B. Energy flow rate C. Mass flow rate D. Pressure flow rate
370	The law of conservation of energy is the basis of.	A. Stream line flow B. Equation of continuity C. Bernoulli's equation D. Venture relation
371	1 torr in Nm-2 is expressed as.	A. 130.5 Nm-2 B. 133.3 N m-2 C. 140.2 Nm-2 D. 135.2 Nm-2
372	Pressure of fluid will be low where speed of fluid is.	A. Low B. Zero C. High D. Constant
373	Bunsen burner works on the principle of.	A. Venturi effect B. Terricilli's effect C. Bernoulli's effect D. None of these
374	The dimensional of potential energy per unit volume are same as that of.	A. Work B. Pressure C. Speed D. Density
		A. Work

375	The dimension of pgh has same as that of	A. Work B. Energy C. Pressure D. Mass
376	The term in Bernoulli's equation has the same unit as	A. Work B. Volume C. Pressure D. Force
377	The device used for measurement of liquid flow is.	A. Manometer B. Barometer C. Hydrometer D. Venturimeter
378	The lower reading of blood pressure is called.	A. Systolic pressure B. Diastolic pressure C. Normal pressure D. Non normal pressure
379	the systolic pressure of normal healthy person is.	A. 120 torr B. 130 torr C. 115 torr D. 110 torr
380	Blood has density equal to that of	A. Mercury B. Sodium C. Honey D. Water
381	Blood pressure is measured by	A. Hydrometer B. Barometer C. Sphygmomanometer D. Galvanometer
382	The density of blood is nearly equal to.	A. Air B. Milk C. Honey D. Water
383	Venturimeter is used ot measure.	A. Speed of fluid B. Pressure of fluid C. Volume of fluid D. Mass of fluid
384	The diastolic pressure of a normal healthy person is.	A. 120 torr B. 110 torr C. 100 torr D. 75-80 torr
385	A 2 meter of high tank is full of water. If a hole appears at its middle, then the speed of efflux is.	A. 4.4 ms-1 B. 10 ms-1 C. 6.2 ms-1 D. 20 ms-1
386	The concentration of red blood cells in the blood is nearly.	A. 40% B. 60% C. 25% D. 50%
387	The instrument which detects the instant as which the external pressure becomes equal to the systolic pressure is called.	A. Manometer B. Sphygmomanometer C. Barometer D. Stethoscope
388	Opted unit to measure blood pressure is.	A. N/m2 B. Pascal C. mm of Hg D. N.m2
389	A quantity which indicates the state and direction of a vibrating body is known as	A. Time period B. Amplitude C. Phase D. Frequency
390	In simple harmonic motion the velocity of a particle is maximum at.	A. Extreme position B. Mean position C. In between extreme and mean position D. None of them
391	the acceleration of a body having SHM, depends upon its.	A. Time period B. Amplitude C. Frequency D. Displacement from mean position
392	The mathematical expression for the restoring force is.	A. F = kx B. F = ma C. F = dp/dt D. F = -kx

		D. F = -kx
393	One complete round trip of a vibrating body is called.	A. Frequency B. Time period C. Vibration D. Amplitude
394	The product of time period and frequency is.	A. Zero B. 1 C. 2 D. 3
395	If the time period of simple pendulum is 2 seconds its frequency will be.	A. 1 Hz B. 0.5 Hz C. 1.5 Hz D. 2 Hz
396	The velocity of a particle having SHM is 'v' at means position. If its amplitude is doubled them velocity at mean position will be	A. v/2 B. v C. 2v D. 4 v
397	the distance covered during one vibration of an oscillating body in terms of amplitude 'A' is	A. A/2 B. A C. 2A D. 4A
398	The wave form of SHM is.	A. Sine wave B. Cosine wave C. Tangent wave D. Square wave
399	The time period of an oscillating mass spring system is 10 second. If mass attached to spring id doubled then time period becomes.	A. 10 sec B. 20 sec C. 5 sec D. None of these
400	If the tension a stretched string is made four times then the velocity of wave.	A. Remains same B. Is halved C. Becomes twice D. Becomes 4 times
401	A spring has a spring constant k. If it is cut in two equal parts, the spring constant of each part will be	A. K B. 2 K C. K/2 D. 4K
402	the length of simple pendulum of time period 1 second is	A. 2 m B. 1 m C. 0.5 D. 0.25 m
403	If amplitude of a simple pendulum is increased by 4 times the time period will be.	A. Four times B. Half C. Same D. Two times
404	At which place the motion of a simple pendulum will be slowest.	A. Karachi B. K-2 C. Murree D. Lahore
405	Time period of simple pendulum only depends on	A. Mass B. Amplitude C. Density D. Length
406	A spring of spring constant 10 N/m after loading that amplitude is 2m. Then the maximum P.E. is	A. 10 J B. 20 J C. 30 J D. 40 J
407	The frequency of waves produced in microwave oven is	A. 1435 Hz B. 2450 MHz C. 1860 MHz D. 2850 Hz
408	The wavelength of wave produced by microwave oven is.	A. 12 cm B. 12 m C. 18 m D. 18 cm
409	Turning of radio is example of.	A. Mechanical resonance B. Electrical resonance C. Physical resonance D. Biological resonance
		A. simple harmonic motion B. Forced oscillation

410	Oscillation of shock absorber of a car is practical example of.	B. Forced oscillation C. Damped oscillation D. Undamped oscillation
411	A phenomenon by which energy is dissipated from the oscillating system is called.	A. Forced oscillation B. Free oscillation C. Damping D. Simple harmonic motion
412	Longitudinal waves do not exhibit	A. Reflection B. Refraction C. Polarization D. Diffraction
413	When the amplitude of a wave is increase to doubled is energy.	A. Remain the same B. Increases 4 times C. Increases by two times D. Decreases by half
414	Sound waves are	A. Electromagnetic waves B. Transverse waves C. Compressional waves D. Matter waves
415	Light waves are	A. Longtail waves B. Transvers waves C. Stationary waves D. Mechanical wave
416	the example of mechanical waves is	A. Water waves B. Infrared waves C. Radio waves D. Ultraviolet waves
417	The portion of the wave above mean level is called.	A. Node B. Antinode C. Crest D. Trough
418	In vibrating string, the points where the amplitude is maximum are called.	A. Nodes B. Antinodes C. Troughs D. Crests
419	the wavelength of transverse wave travelling with a speed 'v' having frequency 'f' in equal to	A. f/v B. Vf C. V/f D. f/V2
420	The distance covered by wave in 1 sec is	A. wavelength B. Wave number C. Wave speed D. Frequency
421	Half wavelength corresponds to	A. 0 ^o B. 90 ^o C. 180 ^o D. 360 ^o
422	10 waves pass through a point in 2 seconds with speed 10 ms-1 the frequency of wave will be	A. 1 Hz B. 2 Hz C. 5 Hz D. 10 Hz
423	The profile of periodic waves generated by a source executing S.H.M is represented by a.	A. Circle B. Sine curve C. Tangent curve D. Cosine curve
424	If 332 waves pass through a medium in 1 second with speed of 332 ms-1 then wavelength will be	A. 7 m B. 332 m C. 664 m D. 1 m
425	Crests and trough are formed in.	A. Longitudinal waves B. transverse waves C. Stationary waves D. Compression waves
426	If 20 waves passes through he medium in 2 sec of 10 ms-1 then he wavelength is.	A. 200 m B. 2 m C. 1 m D. 0.5 m
427	The distance between two consecutive crest is called.	A. Displacement B. Amplitude C. Wave front D. Wavelength
		A. Displacement

428	The distance between two consecutive trough is called.	A. Displacement B. Amplitude C. Wave length D. Wave front
429	If the wave motion is 0.01 sec and wave speed is 100 ms-1 then frequency of wave is.	A. 0.5 Hz B. 1 Hz C. 10 Hz D. 100 Hz
430	If 30 waves per second pass through a medium at a speed 30 ms-1, then the wavelength is.	A. 30 m B. 15 m C. 1 m D. 28 m
431	According to Newton, sound travels in air under conditions of.	A. Adiabatic B. Isothermal C. Isobaric D. Isochoric
432	According to Newton's formula, the speed of sound in air at STP is	A. 332 ,ms-1 B. 340 ms-1 C. 350 ms-1 D. 280 ms-1
433	Speed of sound in vacuum is	A. 280 ms-1 B. 332 ms-1 C. 333 ms-1 D. Zero ms-1
434	the velocity of sound at 0 ^{O}C is 332 ms-1, the velocity of sound at 10 ^{O}C will be	A. 337.1 ms-1 B. 338.1 ,ms-1 C. 342.1 ms-1 D. 328.1 ms-1
435	The speed \velocity of sound is greatest in.	A. Air B. Steel C. Ammonia D. Water
436	The speed of sound is greater in solids due to their high.	A. Density B. Pressure C. Temperature D. Elasticity
437	Increase in the velocity of sound in air for 1 ^{O}C rise in temperature is.	A. 61 ms-1 B. 0.61 ms-1 C. 161 ms-1 D. 261 ms-1
438	The speed of sound in air does not depend upon	A. Temperature B. Pressure C. Density D. Medium
439	Sound travel faster in	A. CO2 B. H2 C. O2 D. He
440	The speed of sound in air would become double than ots speed at 10 ^{O}C at a temperature of.	A. 313 ^oC B. 586 ^oC C. 859^oC D. 899 ^oC
441	Increase in speed of sound for 1 ^{O}C rise in temperature is.	A. 0.61 ms-1 B. 0.61 cms-1 C. 61 ms-1 D. 6.1 ms-1
442	If the pressure of a gas is doubled, then speed of sound is.	A. Doubled B. Become half C. Not affected D. Increases by four times
443	With increase of temperature, speed of sound.	A. Remains constant B. Becomes zero C. Decreases D. Increases
444	Speed of sound in copper is	A. 38000 ms-1 B. 3600 ms-1 C. 3500 ms-1 D. 3400 ms-1
445	The error in speed of sound calculated by Newton at STP is about.	A. 0 % B. 14 % C. 15 % D. 16 %

446	Sound wave can not be	A. Reflected B. Refracted C. Diffracted D. Polarized
447	Teh speed of sound in air is 340 m/s. If the pressure of air is doubled then the speed becomes.	A. Double B. Half C. Four times D. Remains same
448	Speed of sound in aluminum at 20 ^{o}C is.	A. 3600 m/s B. 5100 m/s C. 5130 m/s D. 3500 m/s
449	In which medium the speed of sound is greater.	A. Oxygen B. Air C. Water D. copper
450	the louder the sound, the greater will be its.	A. Speed B. Frequency C. Amplitude D. Wave length
451	Frequency range of hearing of cats is.	A. 20-20000 Hz B. 10- 10000 Hz C. 60-20000 Hz D. 60-70000 Hz
452	the velocity of sound is maximum at 20 ^{o}C in	A. Lead B. Copper C. Glass D. Iron
453	When sound waves enter in different medium, the quantity that remains unchanged is.	A. Intensity B. Speed C. Frequency D. Wave length
454	Velocity of sound is independent of	A. Temperature B. Density C. Pressure D. Medium
455	The speed of sound in ari at 0 ^{o}C is 332 ms-1, Then the speed at 40 ^{o}C will be	A. 372 ms-1 B. 356 ms-1 C. 346 ms-1 D. 332 ms-1
456	The process followed by Newton for the determination of speed of sound in air is	A. Adiabatic B. Isothermal C. Isobaric D. Isochoric
457	Two waves of same frequency and moving in the same direction produces.	A. Interference B. Diffraction C. Beats D. Stationary waves
458	When two identical travelling waves are superimposed, velocity of resultant wave.	A. Decreases B. Increases C. Remain same D. Becomes zero
459	When two identical waves superimposed, which can change.	A. Wave length B. Frequency C. Velocity D. Amplitude
460	Diffraction is a special type of	A. Reflection B. Polarization C. Interference D. Refraction
461	On loading the prong of a tuning fork with wax, the frequency of sound.	A. Increases B. Decreases C. Remains same D. First increases then decrease
462	Two tuning forks of frequencies 240 Hz and 243 Hz are sounded together, the number of beats per second is.	A. Zero B. 2 C. 3 D. 4
463	Beats can be heard when difference of frequency is not more than.	A. 8 Hz B. 10 Hz C. 4 Hz

		D. 6 Hz
464	Two tunign forks of frequencies 260 Hz and 256 Hz are sounded together , the number of beats per second is.	A. 2 B. 258 C. 516 D. 4
465	In order to produce beats, the two sound waves should have.	A. The same amplitude B. Slightly different amplitude C. The same frequency D. slightly different frequencies.
466	The periodic variations of sound between maximum and minimum loudness are called.	A. Doppler's effect B. reflection C. Laplace correction D. Beats
467	In stationary waves, the velocity of particle at the node is.	A. Maximum B. Infinite C. Zero D. Varible
468	In stationary waves the points which always remain at rest are.	A. Nodes B. Antinodes C. Crest D. Trough
469	A set of frequencies which are multiples of the fundamental frequency are called.	A. Doppler effect B. Nodal frequencies C. Beat frequencies D. Hamonics
470	If a stretched string 4 m long and it has 4 loops of stationary waves, then the wave length is.	A. 1m B. 2 m C. 3 m D. 4 m
471	Stationary waves are generated on a string of high l, if tension is increased , frequency of vibration will	A. Decrease B. Unchanged C. Half D. Increases
472	A stationary waves is established din a string which vibrates in four segments at a frequency of 120 Hz, Its fundamental frequency is.	A. 15 Hz B. 30 HZ C. 60 Hz D. 480 Hz
473	A stretched string 2 m long and it has 2 hopes of stationary waves hen the wavelength is	A. 4 m B. 2 m C. 3 m D. 1 m
474	The wavelength of fundamental note in one end closed pipe in term of length 'l' of pipe is.	A. 4 l B. 2l C. l D. 1/4 l
475	Wavelength of a wave for closed pipe having length 'l' in the fundamental mode is.	A. 2 l B. 1/2 C. 4 l D. l
476	The pitch of sound deepens upon	A. Intensity of sound B. Loudness of sound C. Wavelength of sound D. Frequency of sound
477	Stars moving away from Earth show a	A. Green shift B. Blue shift C. Red shift D. Yellow shift
478	The apparent change in the pitch of sound due to relative motion is called.	A. Carnot theorem B. Interference C. Doppler effect D. Beats
479	In sonar we use	A. Sound waves B. Ultrasound waves C. Microwaves D. Radio waves
480	Star moving towards the earth show	A. Red shift B. Blue shift C. Green shift D. Yellow shift
		A. Chemical effect

481	Radar system is an application of.	B. Electric effect C. Magnetic effect D. Doppler's effect
482	The speed of stars and galaxies can be calculated by	A. Compton effect B. Stefan's law C. Doppler's effect D. Pascal's law
483	The waves used in radar speed trap are	A. <u>Longitudinal</u> B. Sound wave C. Micro waves D. Matter waves
484	The state of human blood flow can be found by using.	A. Newton's formula of speed of sound B. Interference of sound C. Phenomena of beats D. Doppler's effect of sound
485	A bat finding its correct location by sending	A. Matter waves B. Ultrasonic waves C. Infrasonic waves D. electromagnetic waves
486	Soap film is sunlight appears coloured due to.	A. Dispersion of light B. Diffraction of light C. Scattering of light D. Interference fo light
487	The light energy travels in space as waves was firstly proposed by	A. Maxwell B. Young C. Einsten D. Hydrogen
488	Angle between ray of light and wave front is	A. 0 ^o B. 60 ^o C. 90 ^o D. 120 ^o
489	In case of point source the shape of wave front is.	A. Plane B. spherical C. Circular D. Eliptical
490	the locus of all pint in the same wave of vibration is called.	A. Wave front B. Diffraction C. Interference D. Polarization
491	A ray of light shows the direction of propagation of light It is line which is.	A. Normal to the wave front B. Parallax to the wave front C. Opposite to the wave front D. Equal to the wave front
492	Hygen's principle is used for.	A. Explain polarization B. Locate the wave front C. Find the speed of light D. Find the index of refraction
493	According to Hygen's principle, each point on a wave front acts as a source of.	A. Secondary wavelet B. New wave front C. Sound D. Primary wavelet
494	The fringe spacing increases if we use.	A. Yellow light B. Green lgiht C. Blue light D. Red light
495	An oil film on water surface shows colour due to.	A. Diffraction B. Interference C. Polarization D. Dispersion
496	The blue colour of sky is due to	A. diffraction B. Reflection C. Polarization D. Scattering
497	Sodium chloride in a flame gives	A. Green light B. White light C. Red light D. Yellow light
498	Light entering rom air glass does not change in its.	A. Frequency B. Wavelength C. Velocity D. Direction

499	Fringe spacing is inversely proportional to.	A. Wave length B. Slit separation C. Distance between the slit and screen D. Frequency of light
500	Fringe spacing in Young's double slit experiment increases due to increase in.	A. Slit separation B. Wave length C. Order of Fringe D. Frequency of source
501	The fringe spacing in a double slit experiment can be increased by decreasing.	A. Wavelength of light B. Width of slits C. Slit separation D. Distance between the slits and the screen
502	In blue light is used as compare to red light then fringe spacing.	A. Increase B. Decreases C. Remain same D. Becomes zero
503	In red light is used as compare to blue light then fringe spacing.	A. Decreases B. Remain same C. Increases D. Becomes zero
504	Example of thin film is.	A. Soap burble B. convex lens C. Concave lens D. Glass plate
505	The centre of Newton's fringe is dark due to.	A. Destructive interference B. Diffraction C. Constructive interference D. Polarization
506	Newton's rings are formed due to phenomenon of.	A. Interference B. Dispersion C. Diffraction D. Polarization
507	When newton ring are seen through the transmitted light, then central spot is.	A. Dark B. Blue C. Bright D. Red
508	When one mirror of a Michelson interferometer is moved a distance of 0.5 mm, 2000 fringes and observed, The wavelength of light used is.	A. 5000 m B. 50000 A^o C. 500 cm D. 2000 A^o
509	Michelson's interferometer can be used ot find the	A. Velocity of light B. Wavelength of light C. Velocity of sound D. Wavelength of sound
510	Bending of light around the edges of an obstacle is called.	A. Refraction B. Polarization C. Interference D. Diffraction
511	A typical diffraction grating has certain number of lines per centimeter whose range is.	A. 40 to 50 B. 400 to 5000 C. 400 to 500 D. 4000 to 5000
512	If 'N' is number of lines rule don the grating having length 'L' then grating element 'd' is given by.	A. N/L B. 2N/L C. L/N D. N/2L
513	The wavelength of X-rays is of the order of.	A. 10⁻⁸ m B. 10⁻¹⁰m C. 10⁻⁵m D. 10⁻⁴m
514	X-ray diffraction has been very useful in determining the structure of	A. Hemoglobin B. Stars C. Galaxies D. Stones
515	Sound waves can not be	A. Reflected B. Refracted C. Polarized D. Diffracted

516	The process of confining the beam of light to vibrate in one plane is called.	A. Interference B. Diffraction C. Polarization D. Total internal refraction
517	Which phenomenon of light proves that light waves are transverse in nature.	A. Refraction B. Reflection C. Diffraction D. Polarization
518	The phenomenon of polarization of light reveals that sun light is	A. Longitudinal waves B. Transverse wave C. Electromagnetic waves D. Monochromatic wave
519	The distinguish between transverse and longitudinal wave_____ is used.	A. Refraction B. Interference C. Diffraction D. polarization
520	Which one of the following can not be polarized.	A. Ultra violet rays B. Radio waves C. T.V. Waves D. Sound waves
521	Intensity of light depend on	A. Wave length B. Amplitude C. Velocity D. Frequency
522	Which is nooptically active	A. Sugar B. Tartaric acid C. Water D. Sodium chloride
523	The least distance of distinct vision for the normal eye is.	A. 15 cm B. 25 cm C. 125 cm D. 25 m
524	The ability of reveal the minor details of an object under examination is called.	A. Resolving power B. Magnification C. Scattering D. Reflection
525	The units of magnifying power of microscope or telescope are.	A. Metre B. m⁻¹ C. dioptre D. No unit
526	The magnification of a convex lens of focal length 5 cm is equal to.	A. 5 B. 6 C. 10 D. 23
527	The magnifying power of a convex lens of focal lendth 10 cm is	A. 7 B. 9.6 C. 11 D. 3.5
528	The focal length of convex lens	A. Negative B. Positive C. small D. Large
529	If a convex lens is used as a magnifying glass, whcih lens will give higher magnification that has.	A. Short size B. Long focal length C. Large size D. Short focal length
530	In an object is placed in between focus point and Opticla center of a convex lens, the image formed by lens is.	A. Real inverted B. Virtual diminshed C. Virtual inverted D. Virtual erected
531	If the object is at 5 cm from the lens of simple microscope than its magnifying power will be.	A. 5 B. 10 C. 15 D. 25
532	The final image formed by a simple microscope.	A. Virtual and inverted B. Real and erected C. Virtual and erected D. Real and inverted
533	If an object is placed with in the focal length of a convex lens, its image is formed.	A. Real B. Inverted C. Virtual D. Smaller than object

534	A convex lens acts as diverging lens if the object is placed at	A. F B. 2F C. Between F and 2 F D. Within the F
535	If an object lies at focus point F in front of a converd lens, its image is formed at.	A. 2F B. F C. 3F D. Infinity
536	The final image seen through ey piece in telescope is.	A. Real, enlarge and inverted B. Vertual, enlarge and erect C. Virtual, enlarge and inverted D. In Real, enlarge and erect
537	If focal length of objective and eye piece is 0.5 m and 10 cm respectively then magnifying power of telescope will be.	A. 0.5 B. 5 C. 10 D. 20
538	the final image obtained by astronomical telescope is.	A. Erect B. Virtual C. Magnified D. All of these
539	The magnifying power of an astronomical telescope is 10. If the focal length of objective is 100 cm, then what is the focal length of eye piece.	A. 10 cm B. 100 cm C. 1000 cm D. 5 cm
540	For normal adjustment what is the length of astronomical telescope if focal lengths of astronomical telescope if focal lengths of objective and eye piece are 100 cm 20 cm respectively.	A. 10 cm B. 20 cm C. 5 cm D. 120 cm
541	Which is not the essential component of a spectrometer.	A. Collimator B. Telescope C. Turntable D. Microscope
542	In Michelson's experiment the relation used to find the speed of light is	A. 16 fc B. 1/16 fd C. 16 fd D. 16/fd
543	The Detector in Photo phone is made up of.	A. Cadmium B. Germanium C. Selenium D. Silicon
544	The first person who attempted to measure the speed of light was.	A. Michelson B. Hygen's C. Galileo D. Ability
545	Critical angle is that incident angle in denser medium for which angle of refraction is.	A. 0 ^o B. 45 ^o C. 90 ^o D. 120 ^o
546	Information carrying capacity of optical fibre called.	A. Capacity B. Band width C. Immunity D. Ability
547	A layer over the central core of the jacke is called.	A. Jacket B. Plastic C. Cladding D. Rubber
548	Critical angle is that angle of incident ofr which angle of refraction is.	A. 90 ^o B. 45 ^o C. 42 ^o D. 24 ^o
549	The optical fiber is covered for protection by a	A. Glass Jacket B. Plastic Jacket C. Copper Jacket D. Aluminum Jacket
550	Multimode step index fiber is useful for.	A. Long distance B. Sort distance C. Very long distance D. Infinite distance
551	Multimode graded index fibre has a core whose diameter range lie from	A. 5 to 50 micro meter B. 50 to 100 micro meter

551	Multimode graded index fibre has a core whose diameter range lie from:	C. 40 to 1000 micro meter D. 50 to 10,000 micrometer
552	The light signal in Opticla fiber must be regenerated by advice called.	A. Regenerator B. Generator C. Repeater D. Diode
553	The light emitted from light emitting diode has wave length.	A. 1.1 micro meter B. 1.3 micro meter C. 1.5 micro meter D. 1.7 micro meter
554	Reapters are placed in new system at distance of.	A. 30 km B. 50 km C. 80 km D. 100 km
555	__ will travel faster than other through an optical fibre.	A. Ultraviolet light B. Visible light C. Infrared light D. White light
556	Using a graded Index fibre, the time difference is reduced to about.	A. 1 ns per km B. 33 ns per 100 km C. 33 ns per km D. 1 ns per 100 km
557	For a gas obeying Boyle's Law, if the pressure is doubled, the volume becomes.	A. Double B. Three fold C. One half D. Remains the same
558	Average translational K.E. of molecules for an ideal gas is given as	A. 1/2 KT B. KT C. 2/3 KT D. 3/2 KT
559	A device based upon the thermodynamics property of matter is called.	A. Calorimeter B. Heat engine C. thermometer D. Voltmeter
560	Heat is form of.	A. Power B. Momentum C. Energy D. Torque
561	The ideal gas law is.	A. PV =NVk B. P = NkT C. PV =nRT D. P=nRT
562	The SI unit of product of pressure and volume is.	A. _{Watt} B. Joule C. Pascal D. Newton
563	S.I Unit of pressure of gas is.	A. Nm B. N.m C. N2/m D. N3m
564	A constant temperature, if pressure of a given mass of gas is halved, then its volume becomes.	A. Halve B. Doubled C. Four time D. Constant
565	The potential energy to the molecules of an ideal gas is considered to be.	A. Maximum B. Zero C. 1/2 kx² D. 1/2 kx
566	At constant temperature and pressure, if volume of given mass of a gas is doubled then density is.	A. Doubled B. 1/4 original C. 1/2 of original D. Unchanged
567	Temperature of a gas is increased from 27 oC to 127 oC. The ratio of its mean K.E. will be	A. 3/4 B. 9/16 C. 4/3 D. 10/9
568	Boltzman constant 'k' has same unit as.	A. Temperature B. Energy C. Entropy D. Pressure

569	If the temperature of a gas is constant then <1/2 mv2> of the molecules of gas will be.	A. Constant B. Zero C. Increase D. Decrease
570	The mean kinetic energy of gas is at.	A. 0 ^oC B. -273 ^oC C. 100 K D. 100 ^oC
571	The internal energy of a piece of lead when beaten by hammer will.	A. Increase B. Decrease C. Remains constant D. Increases and then decrease
572	For an ideal gas, the internal energy is directly proportional to.	A. Pressure B. volume C. Mass D. Temperature
573	At which of the following temperature a body has maximum internal energy.	A. -273 ^oC B. 0 K C. 273 K D. -273 K
574	In thermodynamics system internal energy decrease by 100 J and 100 J of work done on the system then heat lost will be.	A. Zero B. 100 J C. 200 J D. -200 J
575	A gas performs 10 J of work while expanding adiabatically. the change in its internal energy is.	A. 10 J B. -10 J C. 100 J D. -200 J
576	A diatomic gas molecules has	A. Translational energy only B. Rotational energy only C. Vibrational energy only D. All translational, Rotational and vibrational energy
577	The internal energy of system does not depend on	A. Temperature B. Pressure C. Path D. Final and initial state
578	Pascal is the unit of	A. Pressure B. Force C. Tension D. Weight
579	A system does 600 J of work and at the same time has its internal energy increased by 320 J. How much heat has been supplied.	A. 28o J B. 920 J C. 600 J D. 200 J
580	According to first law of thermodynamics the quantity which is conserved.	A. Force B. Momentum C. Energy D. Power
581	During adiabatic process, which factor remains constant.	A. Entropy B. Pressure C. Momentum D. Power
582	Which one is true for isothermal process.	A. Q = 0 B. W = 0 C. Q = W(D) Delta U = 0 D. None of these
583	Which is the process in which temperature of the system remains constant.	A. Adiabatic process B. Isochoric process C. Isothermal process D. Isobaric process
584	Which remains constant in an adiabatic process.	A. Volume B. Pressure C. entropy D. temperature
585	Cloud formation in atmosphere is an example of.	A. Isothermal process B. Isochoric process C. Adiabatic process D. Isobaric process
586	Entropy remains constant.	A. Isothermal process B. Adiabatic process C. Isochoric process

		D. Isobaric process
587	the change in internal energy is defined as	A. Q - W B. Q-T C. Q + P D. Q - P
588	the work done in isochoric process is.	A. Constant B. Variable C. Zero D. Depend upon condition
589	In the thermodynamics process , the equation W = -delta U represents.	A. Isothermal expension B. Isothermal compression C. Adiabatic expansion D. Adiabatic compression
590	The difference between two molar capacities is equal to.	A. Plank's constant B. General gas constant C. Molar gas constant D. Boltzmann constant
591	The work done is isochoric process is.	A. Constant B. Variable C. Zero D. Depend upon condition
592	The difference between tow molar capacities is equal to.	A. Plank's constant B. General gas equation C. Molar gas constant D. Boltzmann constant
593	For a diatomic gas Cv= 5R/2 then gamma for this gas is.	A. 5/7 B. 4/35 C. 7/5 D. 35/4
594	Which is an example of irreversible process.	A. Explosion B. Evaporation C. Slow compression D. A chemical explosion
595	No of spark plugs needed in the diesel engine are.	A. 0 B. 1 C. 2 D. 3
596	The efficiency of diesel engine is about	A. 25 % to 30% B. 35% to 40% C. 40% to 50% D. 50% to 60%
597	For working of heat engine, there must be	A. A source B. A sink C. Ether of these D. Both of them
598	The efficiency of heat engine whose sink is at 17 ^{o}C and source at 200 ^{o}C is.	A. 38% B. 63% C. 80% D. 90%
599	For working of heat engine, there must be.	A. A source B. A sink C. either of these D. Both of these
600	An ideal reversible heat engine has	A. 100% efficiency B. Highest efficiency C. 80% D. 90%
601	An ideal heat engine can only be 100% efficient if its cold temperature reservoir is at.	A. 0 K B. 0 ^oC C. 100 K D. 100 ^oC
602	The curve representing an adiabatic process is called.	A. An adiabatic B. An isotherm C. Both of these D. None of these
603	Carnot cycle consists of.	A. Two steps B. Three steps C. Four steps D. Five steps
		A. P - T graph

604	The Carnot cycle can be shown by which graph	B. P - V Graph C. V- T graph D. PV -T graph
605	The measure of hotness or coldness of a substance is.	A. Temperature B. Heat C. Internal energy D. Energy
606	In case the work done in zero.	A. Constant pressure B. Constant volume C. Constant temperature D. Constant mass
607	A heat engine operates between the temperature 1000 K and 400 K, Its efficiency is.	A. 100% B. 70% C. 60% D. 50%
608	The efficiency of a Carnot Heat Engine is 100% if temperature of sink T2 is.	A. 0 ^oC B. 0 K C. 0 ^oF D. 100 K
609	A Carnot engine has an efficiency of 50% when its sink temperature is at 27 ^{o}C. The temperature of source.	A. 273^oC B. 300 ^oC C. 327 ^oC D. 373 ^oC
610	If heat engine absorb 400 J and rejects 200 J heat energy, its efficiency will be.	A. 25% B. 50% C. 70% D. 100%
611	If the temperature of sink is absolute zero then the efficiency of heat engine engine should be.	A. 100% B. 50% C. Infinite D. zero
612	Efficiency of a heat engine working between 27 ^{o}C and 32 ^{o}C will be.	A. 50% B. 90% C. 40% D. 62%
613	Value of triple point of water is given as.	A. Zero K B. 100 K C. 273.16 K D. 373.16 K
614	Unite of thermodynamics scale of temperature is.	A. Centigrade B. Fahrenheit C. Kelvin D. Celsius
615	The temperature scale which is independent of nature of substance is.	A. Thermodynamic scale B. Centigrade scale C. Fahrenheit scale D. Regnault scale
616	The actual efficiency of property turned petrol engine is.	A. 20% to 30% B. 30% to 35% C. 40% to 45% D. 25% to 30%
617	No spark plug is needed in the	A. Petrol engine B. Diesel engine C. Gas engine D. Water engine
618	The efficiency of diesel engine is about	A. 25% to 30% B. 35% to 40% C. 40% to 50% D. 50% to 60%
619	The number of spark plug needed in diesel engine is	A. 0 B. 2 C. 3 D. 4
620	A cycle of petrol engine undergoes	A. Two process B. Three process C. Four process D. single process
621	Force acting on the piston to move outward is.	A. Compressive stoke B. Power stoke C. All stoke D. Exhaust stoke

622	The entropy of the universe with passage of time is.	A. Increases B. Decreases C. Remain constant D. Increases and decreases
623	Efficiency of steam locomotive is.	A. 8% B. 10% C. 9% D. 7%
624	In reversible process the entropy of system.	A. Remain constant B. Decrease C. Increase D. Becomes zero
625	Entropy of measure of.	A. Internal energy of system B. Order of system C. Disorder of system D. Potential energy of system
626	Not change in entropy of a system after one complete Carnot cycle is.	A. Positive B. Negative C. Zero D. None of these
627	The increase in thermal pollution of environment means.	A. Increase in the entropy B. Decrease in the entropy C. Entropy remains constant D. Entropy becomes zero
628	When temperature of source and sink of a heat engine becomes equal then the entropy change will be.	A. zero B. Minimum C. Maximum D. Negative
629	When hot and cold water are mixed, the entropy.	A. Decreases B. Increases C. Remain constant D. Zero
630	If heat is added to a system, then its entropy will.	A. Increases and positive B. Decrease and positive C. Increases but negative D. Decreases but negative
631	Environmental crisis are also known as	A. Population crisis B. Entropy crisis C. War crisis D. Mass crisis
632	An immediate source of energy for our body is:	A. mango B. Glucose C. mushroom D. meat
633	Food rich in proteins is:	A. potato B. grapes C. vegetables D. bread
634	Computer Chips are made of	A. carbon B. Gemanium C. Silicon D. Sodium
635	The study of Physics deals with	A. Laws of motion B. The structure of space and time C. Force present in the nature D. All of the above
636	The Science of physics based on	A. Fundamental Quantities B. Hyppthesis C. Experimetns and measurement D. Only definitaon
637	The Branch of hysics wave mechanics introduced by	A. einstein B. De broglie C. Max Planck D. Bohar
638	In branch of physics which deals with the nuclear particls such as neurtons, protons adn nuclear structur is called	A. Nuclear Physics B. Solid state Physics C. Particle Physics D. Plasma physics
639	The branch of physics which deals with the properties of gravitational field, electromagnetic	A. Aerodynamics B. Field theory

	field and nuclear field is called.	C. Acorestics D. Hydrodynamics
640	The Idea that light is electromagnetic waves was indroduced by	A. Maxwell Planck B. Newton C. Fermi D. Crooks
641	Law of physics expressed in term of	A. Base quantites B. Derived quantities C. a and b D. None of these
642	the study of nature is classified into	A. Five brancehs B. Six Branches C. Two Branchs D. None of these
643	Engineering physics, Astrophysics,Bio Physics and Geophysics are	A. Branches of Physics B. Branches of Chemistry C. Applied Physics D. None of these
644	--------- is area of physics	A. Chemical physics B. astrophysics C. Mechanics D. None of these
645	Teh overlapping of physics and other fields gave brith to	A. Interdisciplinary areas of physics B. Areas of Physics C. Areas of science D. All of these
646	The branch of physics which deals with the study of production, propagation and properties fo sound waes is called.	A. Heat and thermodynamcis B. Optics C. Acoustics D. Mechanics
647	The branch of Physics wich deals with velocities approaches the velocity of light is called	A. Quantum Physics B. Relati vistics Mechanics C. Wave Mechanics D. None of these
648	Experimentation and practical verification was fist indroduced by	A. The Muslim Scientists B. The Greek philosopher C. The European scientsts D. None of these
649	Physics bases on Newtonian mechanics is called	A. astrophysics B. Modern Physics C. Classical Physics D. Meta Physcis
650	Pascal is famous for his work	A. Hydrodynamics B. Hydrostatics C. Laws of gases D. Behaviour of elastics bodies
651	System Intenational was established in	A. 1967 B. 1960 C. 1971 D. 1940
652	The basics quantity among the following is	A. Mass B. Torque C. Force D. Velocity
653	Which one of the scientist made some contribution to geometrical optics?	A. Phythagoras B. Archimedes C. Euclid D. Plato
654	Which of the following is the derived quantity.	A. Time B. Length C. Area D. Mass
655	Which of the following is a set of supplementary units	A. Radian and kilogram B. Radian and Steradian C. Steradian and time D. Mole and radian
656	The SI unit for measuring plane angle is	A. Streadian B. Radian C. Both a and B D. None of these
		A. 1900

657	SI units of time was redefined in	B. 1967 C. 1960 D. 1983
658	Physical quantiaties are divided into	A. Two Categories B. Six categories C. Three categories D. None of these
659	the quantities which are define din term of other physical quantieis are called	A. Base Quantities B. Derived quantities C. Bothe a and b D. None of these
660	The basic units in system international units are	A. Theree B. Seven C. Five D. Two
661	The fundamental quanties which form basic for M.K.S system are	A. Mass , Length , and time B. Mass, acceleration and time C. Mass, work and time D. Velocity, force and time
662	Supplementary units are.	A. Three B. Two C. Five D. One
663	The SI units of solid angle is	A. Streadian B. Radian C. Degree D. None of these
664	The system international SI built up from	A. Derived Units B. Supplementary units C. Basic Units D. All of these
665	Metre is the basics unit of	A. Mass B. Force C. Velocity D. Length
666	The kilogramis the basic unit of	A. Time B. Weight C. Length D. Mass
667	One mile is equal to	A. 1.625 km B. 1.609 km C. 1.325 km D. 1.850 km
668	One foot is equal to	A. 31.90 cm B. 30.48 cm C. 30.84 cm D. 84.30 cm
669	Light year is the unit of	A. Distance B. Time C. Light D. Velocity
670	The SI unit of force is.	A. Dyne B. Joule C. Volt D. Newton
671	The SI unit of intensity of light is	A. Joule B. Mole C. Candila D. Kilomole
672	The SI Unit of amount of substance is	A. Mole B. Joule C. Volt D. Ohm
673	Time taken by light to reach from sun to earth is.	A. 8 min 20 sec B. 7 min 20 sec C. 9 min 20 sec D. None of these
674	Time taken by light to reach from moon to earth is	A. 1 min 20 sec B. 8 min 20 sec C. 3 min 20 sec D. 2 min 20 sec

675	Number of seconds in a day is	A. 9000 sec B. 3600 sec C. 86400 sec D. 43200 sec
676	The Unit of thermodynamic temperature is.	A. C^o B. F^o C. K D. None of these
677	The numer of significant figureswith the increases accracy of the measuring instrument	A. Decreases B. Remains unchanged C. Increasees D. None of these
678	The number of significant figures with the increases degree of approximation	A. Decreases B. Increases C. Remains unchanged D. None of these
679	The number of significant figure in 8.80×10^6 kg is	A. 1 B. 3 C. 6 D. 5
680	The number 64.350 is rounded off as	A. 64.4 B. 64.46 C. 63.35 D. 64.36
681	The numebr of significant figures in 0.809999 is	A. 2 B. 3 C. 5 D. 6
682	Significant figures in 0.000546	A. 1 B. 4 C. 3 D. 5
683	The error in a certain measurement occurs due to	A. Negligence of a person B. In appropriate technique C. Faulty Appraatus D. All of rhe above
684	Teh uncertainty may occur due to	A. Limitation of an instrument B. Natureal variance of the object C. Personal negligence D. All of the above
685	Systematic erro occurs due to	A. Instrument B. Zero erro of the instrument C. Botah a and b D. None of these
686	Dimensional analysis helps in	A. To convert one unti into another B. Finding relation between quantities C. To confirm the correct answer D. All of the abvove
687	The dimension of power are	A. [ML2T-3] B. [ML2T-2] C. [MLT-1] D. None of these
688	The circumference fo the earth was determined by	A. Bohr B. A Beruni C. Ibn al Haithm D. Chadwick
689	Han discovered uranium fissionin	A. 1940 B. 1938 C. 1935 D. 1939
690	Errors due to incorrect design of a device are called	A. Random Error B. Systematic Error C. Physical Error D. None of these
691	The period of the earth is equal to	A. one lunar day B. One astronomical C. One Solar day
692	Which one of the followign scientistis made some conributions to geometrical optics	A. Plato B. Archimedes C. Euclid D. None of these

693	The founder of mathematical physics is	A. EuclidArchimedes B. Plato C. Aristotle
694	Which one of the followign Muslim mathmatision determined the earths circumference.	A. Al Beruni B. Ibn Sina C. Al Khawrizmi D. None of these
695	Symbolically solid angle is represented as	A. Sr B. rad C. 0 D. cd
696	73.650 rounded off upto one decimal is	A. 73.6 B. 74.00 C. 73.7 D. 73.65
697	[LT-2] is demensional formula for	A. Acceleration B. Velocity C. Force D. Momentum
698	The error is constant for .....error	A. Random B. Systematic C. Both a and b D. All
699	For 0.0036 no. of significnat digits	A. 1 B. 3 C. 2 D. 4
700	For 2.450 no. of significant digits.	A. 2 B. 1 C. 3 D. 4