

1st Year Fsc Physics Online Test

Sr	Questions	Answers Choice
1	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
2	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
3	One radian is equal to.	A. 75.3 ^o B. 57.3 ^o C. 35.7 ^o D. 73.3 ^o
4	The speed of sound in air does not depend upon	A. Temperature B. Pressure C. Density D. Medium
5	Close orbiting satellites orbit the earth at a height of about	A. 400 km B. 4000 km C. 400 m D. 400 cm
6	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
7	Which one is a conservative force	A. Elastic spring force B. Air resistance C. Frictional force D. Tension in the spring
8	The measure of hotness or coldness of a substance is.	A. Temperature B. Heat C. Internal energy D. Energy
9	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
10	One complete round trip of a body is called	A. Displacement B. Time period C. Vibration D. Frequency
11	If heat engine absorb 400 J and rejects 200 J heat energy, its efficiency will be.	A. 25% B. 50% C. 70% D. 100%
12	Sodium chloride in a flame gives	A. Green light B. White light C. Red light D. Yellow light
13	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
14	The mass of a body is quantitative measure of its	A. Motion B. Inertia C. Weight D. All of these
15	The efficiency of diesel engine is about	A. 25 % to 30% B. 35% to 40% C. 40% to 50% D. 50% to 60%

16	The work done will be maximum when angle between F and d.	A. 180° B. 0° C. 90° D. 60°
17	The distance covered by wave in 1 sec is	A. wavelength B. Wave number C. Wave speed D. Frequency
18	Which one is true for isothermal process.	A. $Q = 0$ B. $W = 0$ C. $Q = W(D)$ $\Delta U = 0$ D. None of these
19	Light waves emitted from a source spread in	A. Specific direction B. All direction C. Upward direction D. None of these
20	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
21	The dimensions of angular velocity are	A. $[LT^{-1}]$ B. $[LT^{-2}]$ C. $[T^{-1}]$ D. $[L^{-1}T^{-1}]$
22	The frequency of 2nd pendulum is	A. 0.5 Hz B. 1 Hz C. 1.5 Hz D. 2 Hz
23	The first person who attempted to measure the speed of light was.	A. Michelson B. Hygen's C. Galileo D. Ability
24	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
25	Engineering physics, Astrophysics, Bio Physics and Geophysics are	A. Branches of Physics B. Branches of Chemistry C. Applied Physics D. None of these
26	If 20 waves passes through the medium in 2 sec of 10 ms^{-1} then the wavelength is.	A. 200 m B. 2 m C. 1 m D. 0.5 m
27	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.
28	The time rate of change of angular displacements called.	A. Linear velocity B. Linear speed C. Angular velocity D. Angular speed
29	The types of optical fibres are	A. Three B. Four C. Five D. Six
30	The weight of an object in an elevator moving down with an acceleration of 9.8 m/s^2 will become	A. Half B. Double C. Unchanged D. Zero
31	The system international SI built up from	A. Derived Units B. Supplementary units C. Basic Units D. All of these
32	The dimensional unit of impulse is.	A. $[MLT]$ B. $[MLT^{-1}]$ C. $[ML^{-1}T^{-1}]$ D. $[M^{-1}L^{-1}T^{-1}]$

33	An immediate source of energy for our body is:	<div> <div></div> <div>Glucose</div> </div> <div> <div></div> <div>mushroom</div> </div> <div> <div></div> <div>meat</div> </div>
34	Which one of the following is into directed along the axis of rotation	<div>Angular acceleration</div> <div>Angular momentum</div> <div>Centripetal acceleration</div> <div>Angular displacement</div>
35	the shortest distance between two points is called.	<div>Speed</div> <div>Acceleration</div> <div>Distance</div> <div>Displacement</div>
36	Angle between ray of light and wave front is	<div>0</div> <div>60</div> <div>90</div> <div>120</div>
37	The SI unit of work is	<div>Newton</div> <div>Joule</div> <div>Mol</div> <div>Calorie</div>
38	Law of physics expressed in term of	<div>Base quantites</div> <div>Derived quantities</div> <div>a and b</div> <div>None of these</div>
39	Force acting on the piston to move outward is.	<div>Compressive stoke</div> <div>Power stoke</div> <div>All stoke</div> <div>Exhaust stoke</div>
40	The minimum number of correctly positioned communication satellites to cover whole populated earth is.	<div>2</div> <div>3</div> <div>100</div> <div>200</div>
41	In the thermodynamics process , the equation $W = -\Delta U$ represents.	<div>Isothermal expansion</div> <div>Isothermal compression</div> <div>Adiabatic expansion</div> <div>Adiabatic compression</div>
42	The profile of periodic waves generated by a source executing S.H.M is represented by a.	<div>Circle</div> <div>Sine curve</div> <div>Tangent curve</div> <div>Cosine curve</div>
43	2 radian = ____	<div>2 m</div> <div>4 m</div> <div>57.3 m</div> <div>114.6 m</div>
44	X-ray diffraction has been very useful in determining the structure of	<div>Hemoglobin</div> <div>Stars</div> <div>Galaxies</div> <div>Stones</div>
45	The collision between the gas molecules is	<div>Elastic</div> <div>Inelastic</div> <div>Both a and b</div> <div>None of these</div>
46	The efficiency of diesel engine is about	<div>25% to 30%</div> <div>35% to 40%</div> <div>40% to 50%</div> <div>50% to 60%</div>
47	No body begins to move or comes to rest of itself was given by	<div>Newton</div> <div>Pascal</div> <div>Bernoulli</div> <div>Bu Ali Sina</div>
48	More details of an object can be seen with a microscope by using	<div>Green light</div> <div>Red light</div> <div>Yellow light</div> <div>Blue light</div>
49	Fringe spacing is inversely proportional to.	<div>Wave length</div> <div>Slit separation</div> <div>Distance between the slit and screen</div> <div>Frequency of light</div>
50	The resultant of two forces 30 N and 40 N acting parallel to each other is.	<div>30 N</div> <div>40 N</div> <div>70 N</div> <div>40 N</div>

51	Damping is the process in which energy	A. Increases B. Remains constant C. Dissipates D. None of these
52	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
53	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
54	The actual efficiency of properly turned petrol engine is.	A. 20% to 30% B. 30% to 35% C. 40% to 45% D. 25% to 30%
55	A heat engine operates between the temperature 1000 K and 400 K, Its efficiency is.	A. 100% B. 70% C. 60% D. 50%
56	Longitudinal waves do not exhibit	A. Reflection B. Refraction C. Polarization D. Diffraction
57	Stoke's law holds for bodies having.	A. Spherical shape B. Oblong shape C. Rectangular shape D. All shapes
58	A vector is denoted by	A. Light face B. Bold face C. Both a and b D. None of these
59	The speed of sound is greater in solids due to their high.	A. Density B. Pressure C. Temperature D. Elasticity
60	The space within which gravitational force acts on a body is called	A. Electric field B. Gravitational field C. Magnetic field D. Force field
61	First law of thermodynamics can be defined by the equation	
62	Bending of light around the edges of an obstacle is called.	A. Refraction B. Polarization C. Interference D. Diffraction
63	The Bragg's equation is given by	
64	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
65	The diastolic pressure of a normal healthy person is.	A. 120 torr B. 110 torr C. 100 torr D. 75-80 torr
66	The unsteady flow of a fluid is called	A. Stream line B. Turbulent flow C. Average flow D. Viscous flow
67	The distinguish between transverse and longitudinal wave_____ is used.	A. Refraction B. Interference C. Diffraction D. polarization
68	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
69	When two waves of same frequency travel in opposite direction, the phenomenon will be	A. Diffraction B. Stationary waves C. Polarization D. Interference

		D. Interference
70	Dot product of two non zero vectors is zero if angle between them is.	A. 30° B. 60° C. 45° D. 90°
71	The number 64.350 is rounded off as	A. 64.4 B. 64.46 C. 63.35 D. 64.36
72	For an ideal gas, the internal energy is directly proportional to.	A. Pressure B. volume C. Mass D. Temperature
73	An oil film on water surface shows colour due to.	A. Diffraction B. Interference C. Polarization D. Dispersion
74	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
75	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.
76	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
77	Direction of a vector in space requires	A. Two axis B. Three axis C. Four axis D. Both a and b
78	The formula of centripetal acceleration is	
79	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
80	The period of the earth is equal to	A. one lunar day B. One astronomical C. One Solar day
81	The temperature scale which is independent of nature of substance is.	A. Thermodynamic scale B. Centigrade scale C. Fahrenheit scale D. Regnault scale
82	----- is area of physics	A. Chemical physics B. astrophysics C. Mechanics D. None of these
83	Rate of change of velocity is called	A. Speed B. Acceleration C. Displacement D. Torque
84	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
85	In case of planets centripetal force is provided by	A. Coulomb's force B. Electrostatic force C. Gravitational force D. Magnetic force
86	The term in Bernoulli's equation has the same unit as	A. Work B. Volume C. Pressure D. Force
87	Bright fringes are also called as	A. Minima B. Maxima C. Wave front

		C. wave front D. Ray of light
88	A force of 10N makes an angle 30° with y axis. Then magnitude of x -component is.	A. 5 N B. 8.66 N C. 10 N D. Zero
89	Number of seconds in a day is	A. 9000 sec B. 3600 sec C. 86400 sec D. 43200 sec
90	The motion of a body moving along a circular path is called.	A. Translational motion B. Angular motion C. Vibratory motion D. Linear motion
91	Computer Chips are made of	A. carbon B. Germanium C. Silicon D. Sodium
92	Total confined light is obtained by	A. Total internal reflection B. Refraction of light C. Diffraction D. Polarization
93	The wavelength of wave produced by microwave oven is.	A. 12 cm B. 12 m C. 18 m D. 18 cm
94	If 'N' is number of lines ruled on the grating having length 'L' then grating element 'd' is given by.	A. N/L B. 2N/L C. L/N D. N/2L
95	The weight of the body at the centre of earth is	A. Maximum B. Minimum C. Zero D. Infinite
96	The centre of Newton's rings will be	A. Dark B. Bright C. Coloured D. Not visible
97	Physical quantities are divided into	A. Two Categories B. Six categories C. Three categories D. None of these
98	Maximum number of components of a vector may be	A. Infinite B. One C. two D. three
99	The magnifying power of a convex lens of focal length 10 cm is	A. 7 B. 9.6 C. 11 D. 3.5
100	Diffraction is a special type of	A. Reflection B. Polarization C. Interference D. Refraction
101	$A_1b_1 = A_2b_2$ represents	A. Stock's law B. Newton's law C. Equation of continuity D. Bernoulli's equation
102	When Newton's rings are seen through the transmitted light, then central spot is.	A. Dark B. Blue C. Bright D. Red
103	Systematic error occurs due to	A. Instrument B. Zero error of the instrument C. Both a and b D. None of these
104	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
		A. Heat B. Earth

105	Almost all the raw energy is librated from	B. Latum C. Light D. All of these
106	The shortest distance between two points is called	A. Distance B. Amplitude C. Displacement D. Is a number
107	When the projectile reaches the highest point of trajectory, the vertical component of velocity becomes.	A. Small B. Zero C. Maximum D. $V_i \cos$
108	1 KWh =	A. 3.6×10^{³K} B. 3.6×10^{⁶K} C. 3.6×10^{⁹J} D. 3.6×10^{¹²J}
109	[LT-2] is demensional formula for	A. Acceleration B. Velocity C. Force D. Momentum
110	The numebr of significant figures in 0.809999 is	A. 2 B. 3 C. 5 D. 6
111	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
112	For working of heat engine, there must be	A. A source B. A sink C. Ether of these D. Both of them
113	The pitch of sound deepens upon	A. Intensity of sound B. Loudness of sound C. Wavelength of sound D. Frequency of sound
114	The action and reaction never act on	A. Same body B. Two bodies C. many bodies D. All of these
115	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
116	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
117	Frequency range of hearing of cats is.	A. 20-20000 Hz B. 10- 10000 Hz C. 60-20000 Hz D. 60-70000 Hz
118	Radar system is an application of.	A. Chemical effect B. Electric effect C. Magnetic effect D. Doppler's effect
119	In blue light is used as compare to red light then fringe spacing.	A. Increase B. Decreases C. Remain same D. Becomes zero
120	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%
121	The work done by centripetal force is	A. (-)ve B. (+)ve C. Maximum D. Zero
122	Information carrying capacity of optical fibre called.	A. Capacity B. Band width C. Immunity D. Ability

123	Light entering from air to glass does not change in its.	A. Frequency B. Wavelength C. Velocity D. Direction
124	Which is an example of irreversible process.	A. Explosion B. Evaporation C. Slow compression D. A chemical explosion
125	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
126	The unit of rotational K.E. is	A. rad/sec B. Js C. J D. kgm ²
127	The product of rotational inertia 'I' and angular velocity 'ω' is equal to.	A. Torque B. Linear momentum C. Angular momentum D. Force
128	Value of triple point of water is given as.	A. 0 K B. 100 K C. 273.16 K D. 373.16 K
129	Which one of the following Muslim mathematicians determined the Earth's circumference.	A. Al-Biruni B. Ibn Sina C. Al-Khawarizmi D. None of these
130	If a convex lens is used as a magnifying glass, which lens will give higher magnification that has.	A. Short size B. Long focal length C. Large size D. Short focal length
131	The kilogram is the basic unit of	A. Time B. Weight C. Length D. Mass
132	Sound travels faster in	A. CO ₂ B. H ₂ C. O ₂ D. He
133	The fundamental quantities which form the basis for the 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
134	The concentration of red blood cells in the blood is nearly.	A. 40% B. 60% C. 25% D. 50%
135	The work done in a gravitational field	A. Depends upon the path B. Does not depend upon the path C. (+)ve D. Zero
136	Height of a geostationary orbit of the satellite above the Earth is.	A. 300 km B. 250 km C. 400 km D. None of these
137	The angular version of $F = ma$ is	A. $L = I\omega$ B. $\tau = I\alpha$ C. $L = I\alpha$ D. $\tau = I\omega$
138	A typical diffraction grating has a 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
139	The branch of physics which deals with the properties of a gravitational field, electromagnetic field and nuclear field is called.	A. Aerodynamics B. Field theory C. Acoustics D. Hydrodynamics
140	The error is constant for error	A. Random B. Systematic C. Both a and b D. All

141	Time period of geostationary satellite of radius 'R' is	A. 1 hour B. 48 min C. 1 day D. 1 month
142	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
143	Two waves of same frequency and moving in the same direction produces.	A. Interference B. Diffraction C. Beats D. Stationary waves
144	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
145	Bunsen burner works on the principle of.	A. Venturi effect B. Terricilli's effect C. Bernoulli's effect D. None of these
146	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
147	The value of 'g' at the centre of the earth is	A. Infinite B. 2 g C. 3 g D. zero
148	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
149	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 Å C. 500 cm D. 2000 Å
150	For working of heat engine, there must be.	A. A source B. A sink C. either of these D. Both of these
151	The apparent change in the pitch of sound due to relative motion is called.	A. Carnot theorem B. Interference C. Doppler effect D. Beats
152	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
153	The speed of sound increases with the increase of in	A. Pressure B. Volume C. Temperature D. Density
154	Pi radian is equal to.	A. 0° B. 90° C. 180° D. 57.3°
155	No spark plug is needed in the	A. Petrol engine B. Diesel engine C. Gas engine D. Water engine
156	The law of conservation of mass gives.	A. Bernoulli's B. Venturi relation C. Torricelli's theorem D. Equation of continuity
157	The SI units of flow rate are.	A. m^2s^{-1} B. m^3s^{-2} C. m^3s^{-1} D. m^2s^{-2}
158	Fringe spacing in Young's double slit experiment increases due to increase in	A. Slit separation B. Wave length

158	Fringe spacing in Young's double slit experiment increases due to increase in.	C. Order of Fringe D. Frequency of source
159	The path followed by a projectile is known as its	A. Range B. Trajectory C. Cycle D. Height
160	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
161	the systolic pressure of normal healthy person is.	A. 120 torr B. 130 torr C. 115 torr D. 110 torr
162	A man of 5000 kg moves with an acceleration of 1 ms ⁻² force acting on it is.	A. 5 N B. 500 N C. 50 N D. 5000 N
163	The direction of null vector can be	A. (+) ve B. (-) ve C. Arbitrary D. Zero
164	In case the work done is zero.	A. Constant pressure B. Constant volume C. Constant temperature D. Constant mass
165	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
166	In vibrating string, the points where the amplitude is maximum are called.	A. Nodes B. Antinodes C. Troughs D. Crests
167	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
168	The rate of change of momentum is equal to	A. Impulse B. Torque C. Velocity D. Force
169	If a mass of a body is doubled, then acceleration becomes.	A. Double B. Half C. One fourth D. Constant
170	With increase of temperature, speed of sound.	A. Remains constant B. Becomes zero C. Decreases D. Increases
171	Total change in momentum of an isolated system is	A. Always (+) ve B. Always (-) ve C. Has maximum value D. Zero
172	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
173	If velocity 'v' of an object is double, then K.E. because.	A. Remain same B. Sixteen times C. Double D. Four times
174	Bio mass is converted into fuel by	A. Evaporation B. Fermentation C. Reflection D. Scattering
175	Newton's rings are formed due to phenomenon of.	A. Interference B. Dispersion C. Diffraction D. Polarization

176	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
177	The optical fiber is covered for protection by a	A. Glass Jacket B. Plastic Jacket C. Copper Jacket D. Aluminum Jacket
178	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
179	One complete round trip of a vibrating body is called.	A. Frequency B. Time period C. Vibration D. Amplitude
180	Heat is form of.	A. Power B. Momentum C. Energy D. Torque
181	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
182	If the temperature of a gas is constant then $\langle \frac{1}{2} mv^2 \rangle$ of the molecules of gas will be.	A. Constant B. Zero C. Increase D. Decrease
183	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
184	Question Image	
185	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
186	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
187	Efficiency of a heat engine working between 27 °C and 32 °C will be.	A. 50% B. 90% C. 40% D. 62%
188	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
189	Which one is non renewable source of energy.	A. Hydro electric B. Bio mass C. Tides D. Oil
190	The rate of change of angular velocity is called	A. Angular velocity B. Angular acceleration C. Angular displacement D. Angular speed
191	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
192	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
193	The ability of reveal the minor details of an object under examination is called.	A. Resolving power B. Magnification C. Scattering D. Reflection

A. Plane

194	In case of point source the shape of wave front is.	B. spherical C. Circular D. Elliptical
195	Oil film floating on water exhibits colours due to	A. Interference B. Diffraction C. Polarization D. All of these
196	The value of angular momentum is maximum when θ is	A. 90° B. 60° C. 75° D. 45°
197	Work is negative when angle between F and d is	A. 45° B. 0° C. 90° D. 180°
198	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
199	An ideal reversible heat engine has	A. 100% efficiency B. Highest efficiency C. 80% D. 90%
200	In young's double slit experiment for the interference the central region will be	A. Dark B. Bright C. Coloured D. None of these
201	The Idea that light is electromagnetic waves was introduced by	A. Maxwell Planck B. Newton C. Fermi D. Crooks
202	The internal energy of system does not depend on	A. Temperature B. Pressure C. Path D. Final and initial state
203	What would encourage trade between two countries	A. Different tax system B. Frontier checks C. National currencies D. reduced tariffs
204	The frictional effect between the different layers of fluid is called	A. Terminal velocity B. Stock's law C. Viscosity D. Surface tension
205	The diameter of a lens is called	A. Focal length B. Aperture C. Principle axis D. Centre
206	the wavelength of transverse wave travelling with a speed ' v ' having frequency ' f ' is equal to	A. f/v B. Vf C. V/f D. f/V^2
207	The motion and rest are	A. Absolute B. Relative C. Mutual D. All of these
208	Angular acceleration is produced by	A. Power B. Torque C. Pressure D. Force
209	Inertia may expressed in	A. Kg B. Newton C. Watt D. Joule
210	the height of the geostationary satellite above the equator is.	A. 35000 km B. 36000 km C. 34000 km D. 33000 km
211	When sound waves enter in different medium, the quantity that remains unchanged is.	A. Intensity B. Speed C. Frequency D. Wave length

212	The dimensional of potential energy per unit volume are same as that of.	A. Work B. Pressure C. Speed D. Density
213	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
214	The distance between two consecutive crest is called.	A. Displacement B. Amplitude C. Wave front D. Wavelength
215	The phenomenon of polarization of light reveals that sun light is	A. Longitudinal waves B. Transverse wave C. Electromagnetic waves D. Monochromatic wave
216	The periodic variations of sound between maximum and minimum loudness are called.	A. Doppler's effect B. reflection C. Laplace correction D. Beats
217	A quantity which indicates the state and direction of a vibrating body is known as	A. Time period B. Amplitude C. Phase D. Frequency
218	The SI unit of product of pressure and volume is.	A. Watt B. Joule C. Pascal D. Newton
219	The unit of energy is same as that of	A. Power B. Work C. Torque D. Density
220	Waves transport energy without transporting	A. Matter B. Force C. Momentum D. All of these
221	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. 280 J B. 920 J C. 600 J D. 200 J
222	The temperature of human body on Kelvin scale is	A. 210K B. 310K C. 410K D. 510K
223	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
224	The equations of motion hold good for	A. Variable acceleration B. Uniform acceleration C. Centripetal acceleration D. All of these
225	Pressure of fluid will be low where speed of fluid is.	A. Low B. Zero C. High D. Constant
226	Reapers are placed in new system at distance of.	A. 30 km B. 50 km C. 80 km D. 100 km
227	The magnitude of A will be	A. Zero B. A^2 C. 1 D. A
228	In stationary waves the points which always remain at rest are.	A. Nodes B. Antinodes C. Crest D. Trough
229	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

230	If the radius of droplet becomes half, then its terminal velocity will become.	A. Double B. Half C. One fourth D. Remains same
231	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
232	A device based upon the thermodynamics property of matter is called.	A. Calorimeter B. Heat engine C. thermometer D. Voltmeter
233	The angular acceleration $\alpha =$	
234	A bat finding its correct location by sending	A. Matter waves B. Ultrasonic waves C. Infrasonic waves D. electromagnetic waves
235	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
236	The dimensions of work are.	A. [MLT ⁻¹] B. [MLT ⁻²] C. [ML ² T ⁻²] D. [MLT]
237	Stars moving away from Earth show a	A. Green shift B. Blue shift C. Red shift D. Yellow shift
238	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
239	The work done is isochoric process is.	A. Constant B. Variable C. Zero D. Depend upon condition
240	Salter's duck was invented by	A. Newton B. Einstein C. Prof Salter D. Maxwell
241	Motion of projective is	A. One dimensional B. Two dimensional C. Three dimensional D. Four dimensional
242	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
243	When a vector is multiplied by a (-)ve number its direction	A. Remains constant B. Reversed C. Change by 90° D. None of these
244	The angle of projection for which its maximum height and horizontal range are equal	A. 46° B. 56° C. 66° D. 76°
245	Star moving towards the earth show	A. Red shift B. Blue shift C. Green shift D. Yellow shift
246	A Carnot engine has an efficiency of 50% when its sink temperature is at 27 °C. The temperature of source.	A. 273° C B. 300° C C. 327° C D. 373° C
247	The diver spins faster when moment of inertia becomes.	A. smaller B. Greater C. Constant D. Zero

248	the velocity of sound is maximum at 20 °C in	A. Lead B. Copper C. Glass D. Iron
249	In S.H.M, the acceleration of the body is directly proportional to	A. Weight of body B. Applied force C. Amplitude D. Displacement
250	Light waves are	A. Longtail waves B. Transvers waves C. Stationary waves D. Mechanical wave
251	A layer of rock holding water that allows water to percolate through it with pressure is called.	A. Geyser B. Aquifer C. Stem vent D. Hot spring
252	At which place the motion of a simple pendulum will be slowest.	A. Karachi B. K-2 C. Murree D. Lahore
253	Huygen's proposed, light energy travels in space from source in	A. 1578 B. 1678 C. 1778 D. 1868
254	S.I Unit of pressure of gas is.	A. Nm B. N.m C. N2/m D. N3m
255	In rotational motion the torque is equal to rate of change of	A. Angular velocity B. Linear momentum C. Angular momentum D. Angular acceleration
256	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
257	The word Fluid means	A. To rise B. To fall C. To flow D. To oppose
258	The device used to study the spectra from different sources of light is	A. Telescope B. Optical fibre C. Spectrometer D. Microscope
259	Symbolically solid angle is represented as	A. Sr B. rad C. 0 D. cd
260	The mass of an object is quantitative measure 0 its	A. Momentum B. Acceleration C. Inertia D. Energy
261	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
262	The largest satellite system is managed by	A. 116 countries B. 126 countries C. 136 countries D. 140 countries
263	The mean kinetic energy of gas is at.	A. 0 ^o C B. -273 ^o C C. 100 K D. 100 ^o C
264	Efficiency of steam locomotive is.	A. 8% B. 10% C. 9% D. 7%
265	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

266	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
267	Time period of simple pendulum depends upon	A. Mass of pendulum B. Weight of pendulum C. Length of pendulum D. Shape of pendulum
268	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
269	For angular momentum of system to remain constant, external torque should be.	A. Small B. Large C. Zero D. None
270	Critical angle is that angle of incident ofr which angle of refraction is.	A. 90° B. 45° C. 42° D. 24°
271	When the body moves with constant acceleration the velocity time graph is	A. Parabola B. Hyperbola C. Straight line D. Curve
272	The moment of inertia is analogue to	A. Mass B. Weight C. Torque D. Force
273	Blood pressure is measured by	A. Hydrometer B. Barometer C. Sphygmomanometer D. Galvanometer
274	Viscosity is represented by Greek letter	
275	Increase in speed of sound for 1°C rise in temperature is.	A. 0.61 ms^{-1} B. 0.61 cms^{-1} C. 61 ms^{-1} D. 6.1 ms^{-1}
276	The unit of work in base unit is	A. $\text{Kg m}^{-1} \text{ sec}^{-2}$ B. Kgm sec^{-2} C. $\text{Kgm}^2 \text{ sec}^{-1}$ D. $\text{Kgm}^{-1} \text{ sec}^{-1}$
277	The SI units of solid angle is	A. Steradian B. Radian C. Degree D. None of these
278	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
279	When two identical travelling waves are superimposed, velocity of resultant wave.	A. Decreases B. Increases C. Remain same D. Becomes zero
280	Work has dimension lime	A. Torque B. Momentum C. Velocity D. Power
281	The value of a time period of allow flying satellite is	A. 1 year B. 84 minutes C. 28 hours D. 1 day
282	Second pendulum has a time period	A. 1 sec B. 3 sec C. 2 sec D. 4 sec
283	The curve representing an adiabatic process is called.	A. An adiabatic B. An isotherm C. Both of these D. None of these

284	As we go from pole to equator of earth, the value of 'g'	A. Increase B. Decrease C. Remain constant D. Zero
285	The angle between circumference of a circle and center is	
286	Significant figures in 0.000546	A. 1 B. 4 C. 3 D. 5
287	An ideal heat engine can only be 100% efficient if its cold temperature reservoir is at.	A. 0 K B. 0 ^o C C. 100 K D. 100 ^o C
288	If a body revolves under centripetal force its angular acceleration is	A. Non zero B. Variable C. Increasing D. Zero
289	The 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
290	In stationary waves, the velocity of particle at the node is.	A. Maximum B. Infinite C. Zero D. Variable
291	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
292	For maximum range the angle of projection must be	A. 30 ^o B. 45 ^o C. 60 ^o D. 90 ^o
293	Standard metal according to Michelson's interferometer is equivalent to	A. 1553163.5 wave meter B. 3 x 10 ⁸ meter C. 15503000 meter D. None of these
294	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
295	The relation between the speed and hoop can be written as	A. 2 B. 4 C. 1/2 D. 1/4
296	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
297	Oscillation of shock absorber of a car is practical example of.	A. simple harmonic motion B. Forced oscillation C. Damped oscillation D. Undamped oscillation
298	Who did give the correct formula for the speed of sound in air?	A. Boyle B. Laplace C. Newton D. Einstein
299	The lower reading of blood pressure is called.	A. Systolic pressure B. Diastolic pressure C. Normal pressure D. Non normal pressure
300	Force 12 N and 5 N are added, the resultant can not be	A. 13 N B. 6 N C. 7 N D. 17 N
301	The SI unit of force is.	A. Dyne B. Joule C. Volt D. Newton
		A. Doppler effect B. Natural frequency

302	A set of frequencies which are multiples of the fundamental frequency are called.	B. Modal frequencies C. Beat frequencies D. Hamonics
303	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
304	This is used for	A. Co-efficient of friction B. Co-efficient of expansion C. Co-efficient of viscosity D. Co-efficient of contraction
305	Slope of velocity time graph describes a physical quantity called.	A. Displacement B. Average velocity C. Average acceleration D. Momentum
306	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
307	The Detector in Photo phone is made up of.	A. Cadmium B. Germanium C. Selenium D. Silicon
308	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
309	The energy processes, we use are	A. Efficient B. Not efficient C. Reversible D. None of these
310	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
311	The unit of solar light inversely is	A. Watt B. kW m-2 C. Watt m-2 D. 1 m2
312	Speed of sound in copper is	A. 38000 ms-1 B. 3600 ms-1 C. 3500 ms-1 D. 3400 ms-1
313	Experimentation and practical verification was fist indroduced by	A. The Muslim Scientists B. The Greek philosopher C. The European scientsts D. None of these
314	The study of fluid dynamics is	A. Easy B. Complicated C. Impossible D. None of these
315	The produce oscillation, body is pulled away from its	A. Mean position B. Extreme position C. Both a and b D. None of these
316	The fringe spacing increases if we use.	A. Yellow light B. Green lgiht C. Blue light D. Red light
317	When hot and cold water are mixed, the entropy.	A. Decreases B. Increases C. Remain constant D. Zero
318	The ratio of size of image and size of object is	A. Focal length B. Magnification C. Resolving power D. Principle focus
319	Multimode graded index fibre has a core whose diameter range lie from.	A. 5 to 50 micro meter B. 50 to 100 micro meter C. 40 to 1000 micro meter D. 50 to 10,000 micrometer

A. **Reasonable energy**

320	Biomass is a potential source of	A. Renewable energy B. Non renewable energy C. Both a and b D. Tidal energy
321	The acceleration of a projectile along x axis is.	A. Zero B. Increase C. Decrease D. Equal to 'g'
322	The optical fibre is covered for protection by	A. Glass jacket B. Plastic jacket C. Steel jacket D. Diamond jacket
323	Example of thin film is.	A. Soap bubble B. convex lens C. Concave lens D. Glass plate
324	A force of 20 N acts along x axis, its component is.	A. 0 N B. 10 N C. 20 N D. 30 N
325	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
326	the length of simple pendulum of time period 1 second is	A. 2 m B. 1 m C. 0.5 D. 0.25 m
327	Which is the example of vector quantity	A. Torque B. Speed C. Density D. Work
328	If the object is at 5 cm from the lens of simple microscope then its magnifying power will be.	A. 5 B. 10 C. 15 D. 25
329	Horizontal range is maximum when the angle of projectile is.	A. 0° B. 30° C. 45° D. 60°
330	The slope of velocity time graph shows	A. Total distance covered B. Average acceleration C. Instantaneous acceleration D. Torque
331	The unit of pressure of gas is	A. Nm^{-2} B. Pascal C. Atmosphere D. All of these
332	In the absence of air resistance the acceleration of a body will be	A. Uniform B. Variable C. Instantaneous D. None of these
333	Apparent weight of a man is in upward accelerated lift will	A. Increases B. Decreases C. Remain same D. Increases then decreases
334	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
335	The amount of inertia of 10 kg hoop about the axis of rotation perpendicular to its plane having radius 5 m is	A. 50 kgm ² B. 100 K gm ² C. 150 K gm ² D. 250 K gm ²
336	The velocity of a particle having SHM is 'v' at mean position. If its amplitude is doubled then velocity at mean position will be	A. v/2 B. v C. $2v$ D. 4 v
337	The tides rise in the sea roughly	A. Once a day B. Twice a day C. Three a day D. Four times a day

		D. Four time a day
338	A swing is good example of	A. Resonance B. Vibration C. Time period D. Oscillation
339	Minimum number of unequal forces whose vector sum can be zero are.	A. 5 B. 4 C. 3 D. 2
340	The mathematical expression for the restoring force is.	A. $F = kx$ B. $F = ma$ C. $F = dp/dt$ D. $F = -kx$
341	Soap film is sunlight appears coloured due to.	A. Dispersion of light B. Diffraction of light C. Scattering of light D. Interference of light
342	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
343	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
344	The ballistic missiles are used only for	A. Long range B. Short range C. Medium range D. Constant range
345	The SI unit of angular displacement is.	A. Degree B. Revolution C. Radian D. Rotation
346	The light energy travels in space as waves was firstly proposed by	A. Maxwell B. Young C. Einsten D. Hydrogen
347	Transformation of heat other forms of energy is discussed in	A. Thermal physics B. Thermodynamics C. Atomic physics D. Nuclear physics
348	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 large distance from lens
349	The distance between two consecutive trough is called.	A. Displacement B. Amplitude C. Wave length D. Wave front
350	Identify the non conservative force among the following.	A. Frictional force B. Electrical force C. Gravitational force D. Elastic restoring force
351	Average acceleration is a	A. Scalar quantity B. Vector quantity C. (-) ve quantity D. None of these
352	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
353	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
354	the example of mechanical waves is	A. Water waves B. Infrared waves C. Radio waves D. Ultraviolet waves
355	When a body is vibrating its displacement from mean position	A. Remains constant B. Changes with time C. Remains same

		C. become(-)ve D. None of these
356	Head to tail rule is used for	A. Addition of vectors B. Subtraction of vectors C. Multiplication of vectors D. Division of vectors
357	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
358	If the slope of a velocity time graph gradually decreases then body is said to be moving with	A. Positive acceleration B. Negative acceleration C. Uniform velocity D. None
359	The speed of sound in air would become double than its speed at 10 °C at a temperature of.	A. 313 °C B. 586 °C C. 859 °C D. 899 °C
360	The basic quantity among the following is	A. Mass B. Torque C. Force D. Velocity
361	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
362	Time rate of change of angular displacement is called	A. Linear velocity B. Angular velocity C. Rotational velocity D. Vibrational velocity
363	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
364	Carnot cycle consists of.	A. Two steps B. Three steps C. Four steps D. Five steps
365	The shape of trajectory of short range projectile is	A. Straight line B. Circle C. Elliptical D. Parabolic
366	Which of the following is the derived quantity.	A. Time B. Length C. Area D. Mass
367	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
368	When water falls from tap, its cross sectional area decreases due to.	A. Decrease of speed B. Increase of speed C. Air pressure D. Gravity increase
369	Question Image	
370	In sonar we use	A. Sound waves B. Ultrasound waves C. Microwaves D. Radio waves
371	One mile is equal to	A. 1.625 km B. 1.609 km C. 1.325 km D. 1.850 km
372	The branch of physics which deals with the study of production, propagation and properties of sound waves is called.	A. Heat and thermodynamics B. Optics C. Acoustics D. Mechanics
373	The light signal in optical fiber must be regenerated by device called.	A. Regenerator B. Generator C. Repeater D. Diode

374	For 2.450 no. of significant digits.	A. 2 B. 1 C. 3 D. 4
375	Torricelli's theorem is given by	
376	The founder of mathematical physics is	A. Euclid B. Archimedes C. Plato D. Aristotle
377	The flow of a fluid is of	A. One type B. Two types C. Three types D. Four type
378	If the initial velocity of a projectile becomes doubled, the time of flight will be.	A. Same B. 4 times C. Double D. 3 times
379	The SI unit of power is	A. Joule B. Newton C. Watt D. Kilowatt
380	Half wavelength corresponds to	A. 0° B. 90° C. 180° D. 360°
381	In an object is placed in between focus point and Optical center of a convex lens, the image formed by lens is.	A. Real inverted B. Virtual diminished C. Virtual inverted D. Virtual erected
382	3 Joules of work is done in 3 seconds, then power	A. 6 Watt B. 1 Watt C. 3 Watt D. 2 Watt
383	In branch of physics which deals with the nuclear particles such as neutrons, protons and nuclear structure is called	A. Nuclear Physics B. Solid state Physics C. Particle Physics D. Plasma physics
384	In reversible process the entropy of system.	A. Remains constant B. Decrease C. Increase D. Becomes zero
385	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
386	For normal adjustment what is the length of astronomical telescope if focal lengths of objective and eye piece are 100 cm and 20 cm respectively.	A. 10 cm B. 20 cm C. 5 cm D. 120 cm
387	The final image formed by a simple microscope.	A. Virtual and inverted B. Real and erect C. Virtual and erect D. Real and inverted
388	Which one of the following scientists made some contributions to geometrical optics	A. Plato B. Archimedes C. Euclid D. None of these
389	The frictional force is	A. Conservative force B. Non conservative force C. Electric force D. Magnetic force
390	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 kg ms ⁻¹ B. 50 kg ms ⁻¹ C. 2 kg ms ⁻¹ D. 20 kg ms ⁻¹
391	The direction of vector in space is specified by	A. 1- angle B. 2- angle C. 3- angle D. 4 - angle

392	The drag force increases as the speed of object	<p>A. BECOME ZERO</p> <p>B. Decreases</p> <p>C. Increases</p> <p>D. Remains constant</p>
393	the acceleration along x-axis direction in case of projectile is.	<p>A. Zero</p> <p>B. Equal to gravity</p> <p>C. Maximum</p> <p>D. Constant</p>
394	Beats can be heard when difference of frequency is not more than.	<p>A. 8 Hz</p> <p>B. 10 Hz</p> <p>C. 4 Hz</p> <p>D. 6 Hz</p>
395	Velocity of sound is independent of	<p>A. Temperature</p> <p>B. Density</p> <p>C. Pressure</p> <p>D. Medium</p>
396	The location of near point changes with	<p>A. Age</p> <p>B. Size of the eye</p> <p>C. Sharpness of the eye</p> <p>D. None of these</p>
397	By increasing the amount of stretch in spring the force exerted will	<p>A. Increase</p> <p>B. One watt</p> <p>C. One erg</p> <p>D. One joule</p>
398	If the slope of the velocity time graph remain constant then body is moving with.	<p>A. Uniform velocity</p> <p>B. Negative variable acceleration</p> <p>C. Variable acceleration</p> <p>D. Uniform acceleration</p>
399	Angular displacement is	<p>A. Scalar quantity</p> <p>B. Vector quantity</p> <p>C. Basic quantity</p> <p>D. None of these</p>
400	The efficiency of heat engine whose sink is at 17 °C and source at 200 °C is.	<p>A. 38%</p> <p>B. 63%</p> <p>C. 80%</p> <p>D. 90%</p>
401	If a body is moving in the counter clockwise direction the direction of angular velocity will be	<p>A. Toward the centre</p> <p>B. Away from the centre</p> <p>C. along the linear velocity</p> <p>D. Perpendicular to both radius and linear velocity</p>
402	In Michelson's experiment the relation used to find the speed of light is	<p>A. 16 fc</p> <p>B. 1/16 fd</p> <p>C. 16 fd</p> <p>D. 16/fd</p>
403	A gas performs 10 J of work while expanding adiabatically. the change in its internal energy is.	<p>A. 10 J</p> <p>B. -10 J</p> <p>C. 100 J</p> <p>D. -200 J</p>
404	The magnifying power is also called	<p>A. Resolving power</p> <p>B. Angular magnification</p> <p>C. Strength of eye</p> <p>D. None of these</p>
405	If a stretched string 4 m long and it has 4 loops of stationary waves, then the wave length is.	<p>A. 1m</p> <p>B. 2 m</p> <p>C. 3 m</p> <p>D. 4 m</p>
406	A ray of light shows the direction of propagation of light It is line which is.	<p>A. Normal to the wave front</p> <p>B. Parallax to the wave front</p> <p>C. Opposite to the wave front</p> <p>D. Equal to the wave front</p>
407	The process followed by Newton for the determination of speed of sound in air is	<p>A. Adiabatic</p> <p>B. Isothermal</p> <p>C. Isobaric</p> <p>D. Isochoric</p>
408	Centripetal force perform	<p>A. Maximum work</p> <p>B. Minimum work</p> <p>C. Negative work</p> <p>D. No work</p>
409	A 2 meter of high tank is full of water. If a hole appears at its middle, then the speed of efflux is.	<p>A. 4.4 ms⁻¹</p> <p>B. 10 ms⁻¹</p> <p>C. 6.2 ms⁻¹</p>

		D. 20 ms ⁻¹
410	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
411	The unit of coefficient of viscosity in S.I system	A. Kg ⁻¹ ms ⁻¹ B. Kg m ⁻¹ s ⁻¹ C. kg ⁻¹ m ⁻¹ D. Kg ms ⁻¹
412	Blood has density equal to that of	A. Mercury B. Sodium C. Honey D. Water
413	If $r = 5$ m and $f = 4$ N are along same direction, then torque is	A. 20 Nm B. 5 Nm C. 10 Nm D. Zero
414	Food rich in proteins is:	A. potato B. grapes C. vegetables D. bread
415	If the area 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
416	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
417	The portion of the wave above mean level is called.	A. Node B. Antinode C. Crest D. Trough
418	When a body moves in circular motion, the angle between linear and angular velocity is.	A. 180° B. 90° C. 60° D. 75.3°
419	The wave form of SHM is.	A. Sine wave B. Cosine wave C. Tangent wave D. Square wave
420	The diver spin faster when moment of inertia becomes.	A. smaller B. Greater C. Constant D. Equal
421	Increase in the velocity of sound in air for 1 °C rise in temperature is.	A. 61 ms ⁻¹ B. 0.61 ms ⁻¹ C. 161 ms ⁻¹ D. 261 ms ⁻¹
422	The ideal gas law is.	A. $PV = Nk$ B. $P = NkT$ C. $PV = nRT$ D. $P = nRT$
423	Weight of a 60 kg man in moving elevator with constant acceleration of $\frac{1}{2}g$	A. Zero B. 300 N C. 600 N D. 200 N
424	Energy dissipated usually appears as	A. P.E. B. Heat Energy C. Chemical energy D. Nuclear Energy
425	Vectors have	A. Numerical value B. Directional C. Both a and b D. None of these
426	Angular momentum has the same unit as	A. Impulse x distance B. Power x time C. Linear x time D. work x frequency
427	The dimension of power is	A. MLT ⁻¹ B. ML ² T ⁻²

427	The dimension of power is	C. ML^2T^{-2} D. ML^2T^{-3}
428	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
429	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.
430	___ will travel faster than other through an optical fibre.	A. Ultraviolet light B. Visible light C. Infrared light D. White light
431	The basic units in system international units are	A. Theree B. Seven C. Five D. Two
432	Which is nooptically active	A. Sugar B. Tartaric acid C. Water D. Sodium chloride
433	A collision in which K.E. of the system is not conserved is	A. Elastic collision B. Inelastic collision C. 3rd law of motion D. None of these
434	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
435	The SI unit of angular momentum is	A. J.S-2 B. J.S-1 C. J.S D. J.m
436	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
437	The dimension of power are	A. $[ML^2T^{-3}]$ B. $[ML^2T^{-2}]$ C. $[MLT^{-1}]$ D. None of these
438	In matter, the Atoms are in a state of never ending	A. Motion B. Rest C. Change D. State of decline
439	The SI unit for measuring plane angle is	A. Streadian B. Radian C. Both a and B D. None of these
440	The fluid is said to be incompressible, if its density is.	A. Zero B. Very high C. Constant D. Very small
441	The to and fro motion of a body is called	A. Linear motion B. Rotational motion C. Vibratory motion D. None of these
442	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
443	SI units of time was redefined in	A. 1900 B. 1967 C. 1960 D. 1983
444	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

445	The ratio of the velocities of water in a pipe lying horizontally at two ends is 1 : 4. The ratio of diameters of pipe at these two ends is.	B. 2 : 1 C. 1 : 4 D. 4 : 1
446	The power needed to lift a mass of 5000 g to height of 1 m in 2 seconds is	A. 2.45 watt B. 24.5 watt C. 245 watt D. 2.45 watt
447	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
448	The regular or steady flow of fluid is called	A. Stream line B. Turbulent flow C. Average flow D. None of these
449	The difference between two molar capacities is equal to.	A. Plank's constant B. General gas constant C. Molar gas constant D. Boltzmann constant
450	The speed /velocity of sound is greatest in.	A. Air B. Steel C. Ammonia D. Water
451	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
452	Kg ms ⁻¹ can also be written as	A. Nm B. Ns C. Ns ⁻¹ D. Js
453	Moment of inertia is measured in	A. Kg m ² B. Kg m ⁻² C. Rad s ⁻¹ D. Joule second
454	The entropy of the universe with passage of time is.	A. Increases B. Decreases C. Remain constant D. Increases and decreases
455	The time rate of change of momentum equals	A. Weight B. Applied force C. Impulse D. Mass
456	When distance is plotted against the force, it is taken along	A. x-axis B. y-axis C. z-axis D. None of these
457	The dimensions of work are	A. MLT^{-1} B. MLT^{-2} C. ML^2T^{-2} D. $ML^{-1}T^{-1}$
458	The commercial unit of electric energy is	A. Kilo watt hour B. watt C. Watt hour D. Kilo Watt
459	A force of 100 N makes an angle of 60° with Y- Axis, its horizontal component is.	A. 50 N B. 60 N C. 70.7 N D. 86.6 N
460	The formula for the power is	A. $P = W/d$ B. $P = W/v$ C. $P = W/t$ D. $P = Wt$
461	Which is unimportant in describing the satellite's orbit.	A. Distance of satellite from earth's center B. Gravitational constant G C. Mass of satellite D. Mass of earth
462	100 radians are equal to.	A. 57.3° B. 75.3° C. 573°

463	Multimode step index fibre is useful for	A. Long distances B. Short distances C. Better quality D. Low price
464	The Carnot cycle can be shown by which graph	A. P - T graph B. P - V Graph C. V- T graph D. PV -T graph
465	The motion of a simple pendulum is the example of	A. Vibratory motion B. Rotatory motion C. Periodic motion D. Both a and c
466	The dot product of two vectors A and B will be zero, if angle between A and B is	A. Zero B. 30^o</sup> C. 90^o</sup> D. 180^o</sup>
467	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
468	Which is the process in which temperature of the system remains constant.	A. Adiabatic process B. Isochoric process C. Isothermal process D. Isobaric process
469	The accepted value for speed of light in vacuum	A. $2.99 \times 10^{8} \text{ m - sec}^{-1}$ B. $2.99 \times 10^{6} \text{ m - sec}^{-1}$ C. $2.99 \times 10^{8} \text{ km - sec}^{-1}$ D. $2.99 \times 10^{8} \text{ m - h}^{-1}$
470	A ball is thrown up with 20 ms ⁻¹ at an angle of 60 °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
471	In stationary waves, the particle velocity at nodes is	A. Minimum B. Maximum C. Zero D. Constant
472	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
473	The numer of significant figureswith the increases accracy of the measuring instrument	A. Decreases B. Remains unchanged C. Increasees D. None of these
474	Angular frequency is the characteristic of	A. Linear motion B. Vibratory motion C. Circular motion D. All of these
475	Interplaner distance can be determined by	A. Newton's rings B. Bragg's law C. Diffraction pattern D. Interferometer
476	Entropy of measure of.	A. Internal energy of system B. Order of system C. Disorder of system D. Potential energy of system
477	Vector has both of its components are negative lies in	A. 1st quadrant B. 2nd quadrant C. 3rd quadrant D. 4th quadrant
478	Not change in entropy of a system after one complete Carnot cycle is.	A. Positive B. Negative C. Zero D. None of these
479	Question Image	

480	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
481	Rate of change of displacement is called	A. Speed B. Velocity C. Kinetic energy D. None of these
482	The focal length of a concave lens is always	A. +ve B. -ve C. Zero D. None of these
483	Pressure 'P' of a gas is defined as	A. F/A B. FA C. F/V D. F/D
484	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
485	Watt -m2 is the unit of	A. Energy B. Intensity C. Power D. Work
486	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
487	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
488	Height of projectile is maximum at an angle of.	A. 45 ^o B. 60 ^o C. 30 ^o D. 90 ^o
489	How many orbiting satellites from the Global positing system.	A. 3 B. 12 C. 24 D. 22
490	SI unit of work	A. Newton B. Walt C. Pascal D. Joule
491	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
492	The mechanism of transports energy of all the waves is	A. Different B. Same C. Complicated D. Easy
493	Parallel vectors of same magnitude will be	A. Equal B. Opposite C. Both a and b D. None of these
494	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 above
495	Cloud formation in atmosphere is an example of.	A. Isothermal process B. Isochoric process C. Adiabatic process D. Isobaric process
496	The potential energy to the molecules of an ideal gas is considered to be.	A. Maximum B. Zero C. $\frac{1}{2} kx^2$ D. $\frac{1}{2} kx$
497	Newton's laws of motion were published in	A. 1587 B. 1687 C. 1787 D. 1887

498	The number of spark plug needed in diesel engine is	A. 0 B. 2 C. 3 D. 4
499	The property of bending of light around obstacles is	A. Interference B. Diffraction C. Polarization D. Superposition
500	Intensity of light depend on	A. Wave length B. Amplitude C. Velocity D. Frequency
501	Angular velocity determines, How fast or, How slow a body is	A. Accelerating B. Vibrating C. Rotating D. Oscillating
502	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
503	Opted unit to measure blood pressure is.	A. N/m ² B. Pascal C. mm of Hg D. N.m ²
504	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
505	the acceleration of a body having SHM, depends upon its.	A. Time period B. Amplitude C. Frequency D. Displacement from mean position
506	For 0.0036 no. of significnat digits	A. 1 B. 3 C. 2 D. 4
507	In the absence of external force, the change in momentum is.	A. Zero B. Constant C. Decreasing D. Increasing
508	Physics bases on Newtonian mechanics is called	A. astrophysics B. Modern Physics C. Classical Physics D. Meta Physcis
509	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
510	If velocity time graph is parallel to time axis, then acceleration of moving body will be.	A. Maximum B. Positive C. Zero D. Negative
511	the change in internal energy is defined as	A. Q - W B. Q-T C. Q + P D. Q - P
512	73.650 rounded off upto one decimal is	A. 73.6 B. 74.00 C. 73.7 D. 73.65
513	Sound waves are	A. Electromagnetic waves B. Transverse waves C. Compressional waves D. Matter waves
514	Errors due to incorrect design of a device are called	A. Random Error B. Systematic Error C. Physical Error D. None of these
515	Boltzman constant 'k' has same unit as.	A. Temperature B. Energy C. Entropy D. None of these

		C. Entropy D. Pressure
516	Dot product of vector with itself is.	A. Zero B. 2 A C. A^2 D. A
517	The angle between x-axis, y-axis and z-axis is	A. 45° B. 60° C. 75° D. 90°
518	Which phenomenon of light proves that light waves are transverse in nature.	A. Refraction B. Reflection C. Diffraction D. Polarization
519	Speed of sound in vacuum is	A. 280 ms ⁻¹ B. 332 ms ⁻¹ C. 333 ms ⁻¹ D. Zero ms ⁻¹
520	The maximum range of projectile is 100 km, Take $g=10 \text{ ms}^{-2}$, the initial velocity of the projectile will be.	A. 1000 kms ⁻¹ B. 1 kms ⁻¹ C. 10 kms ⁻¹ D. 100 kms ⁻¹
521	Multimode step index fiber is useful for.	A. Long distance B. Short distance C. Very long distance D. Infinite distance
522	The device used for measurement of liquid flow is.	A. Manometer B. Barometer C. Hydrometer D. Venturimeter
523	The force and torque are analogous to	A. Velocity B. Mass and weight C. Moment of Inertia D. Each other
524	The SI unit of intensity of light is	A. Joule B. Mole C. Candila D. Kilomole
525	The law of conservation of mass gives us	A. Equation of continuity B. Stock's law C. Bernoulli's equation D. Viscosity
526	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
527	Which one is renewable source of energy.	A. Coal B. Uranium C. Biomass D. Natural gas
528	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
529	The focal length of convex lens	A. Negative B. Positive C. small D. Large
530	Direction of angular acceleration is always along	A. x-axis B. y -axis C. z-axis D. The axis of rotation
531	The Newton's formula for the speed of sound in air is	
532	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 its velocity
533	When average velocity becomes equal to instantaneous than body is called moving with.	A. Instantaneous acceleration B. Constant acceleration C. Constant velocity

		C. Constant velocity D. Variable velocity
534	when a ball is thrown straight up, the acceleration at its highest point is.	A. Upward B. Downward C. Zero D. Horizontal
535	The Science of physics based on	A. Fundamental Quantities B. Hypothesis C. Experiments and measurement D. Only definition
536	The circumference of the earth was determined by	A. Bohr B. Al-Biruni C. Ibn al-Haitham D. Chadwick
537	Unit of thermodynamics scale of temperature is.	A. Centigrade B. Fahrenheit C. Kelvin D. Celsius
538	Unit of impulse is equivalent to that of.	A. Force B. Momentum C. Acceleration D. Velocity
539	Turning of radio is example of.	A. Mechanical resonance B. Electrical resonance C. Physical resonance D. Biological resonance
540	The frequency of waves produced in microwave oven is	A. 1435 Hz B. 2450 MHz C. 1860 MHz D. 2850 Hz
541	All points of the rigid body rotating about a fixed axis do not have same.	A. Angular acceleration B. Angular speed C. speed D. Angular displacement
542	Which material has maximum viscosity	A. Glycerin B. Plasma C. Methanol D. Water
543	A frame of reference stationed at the earth is an	A. Inertial frame B. Non-inertial frame C. Accelerated frame D. Laboratory frame
544	A diatomic gas molecule has	A. Translational energy only B. Rotational energy only C. Vibrational energy only D. All translational, Rotational and vibrational energy
545	According to Newton, sound travels in air under conditions of.	A. Adiabatic B. Isothermal C. Isobaric D. Isochoric
546	The acceleration produced by elastic restoring force is	A. Perpendicular to force B. Opposite to force C. In same direction as force D. Zero
547	A stretched string 2 m long and it has 2 loops of stationary waves then the wavelength is	A. 4 m B. 2 m C. 3 m D. 1 m
548	The product of time period and frequency is.	A. Zero B. 1 C. 2 D. 3
549	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
550	In rotational motion the analogous of mass is	A. Angular acceleration B. Torque C. Moment of inertia D. Angular momentum

551	For a diatomic gas $C_v = 5R/2$ then γ for this gas is.	A. $5/1$ B. $4/35$ C. $7/5$ D. $35/4$
552	In case of point source the shape of wave front is	A. Circular B. Spherical C. Elliptical D. Square
553	The behaviour of gases is discussed by	A. Knowing their nature B. Knowing their temperature C. Kinetic theory D. Maxwell's theory
554	the locus of all pint in the same wave of vibration is called.	A. Wave front B. Diffraction C. Interference D. Polarization
555	The units of magnifying power of microscope or telescope are.	A. Metre B. m^{-1} C. dioptre D. No unit
556	A communication satellite is used ot reflect the signal of.	A. Microwaves B. Radio waves C. y rays D. x-rays
557	The Branch of hysics wave mechanics introduced by	A. einstein B. De broglie C. Max Planck D. Bohar
558	The terminal velocity can be obtained by using	A. Newton's law B. Stock's law C. Guass's law D. None of these
559	Average translational K.E. of molecules for an ideal gas is given as	A. $1/2 KT$ B. KT C. $2/3 KT$ D. $3/2 KT$
560	The dimension of ρgh has same as that of	A. Work B. Energy C. Pressure D. Mass
561	Change of momentum is equal to	A. Force B. Tension C. Impulse D. Pressure
562	Usually the x-axis is taken as	A. Vertical axis B. Horizontal axis C. +ve axis D. -ve axis
563	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
564	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
565	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
566	The SI unit of flow rate are	A. $m^{-2} \text{ sec}^{-2}$ B. $m^3 \text{ sec}^{-1}$ C. $m^3 \text{ sec}^{-2}$ D. $m^{-3} \text{ sec}^{-3}$
567	The speed of light was measured correctly by	A. Galileo B. Michelson C. Newton D. Maxwell

568	Crests and trough are formed in.	A. Longitudinal waves B. transverse waves C. Stationary waves D. Compression waves
569	No of spark plugs needed in the diesel engine are.	A. 0 B. 1 C. 2 D. 3
570	Image formed by a concave lens is	A. Real B. Virtual C. Erect D. None of these
571	Pascal is famous for his work	A. Hydrodynamics B. Hydrostatics C. Laws of gases D. Behaviour of elastics bodies
572	Time period of simple pendulum only depends on	A. Mass B. Amplitude C. Density D. Length
573	One foot is equal to	A. 31.90 cm B. 30.48 cm C. 30.84 cm D. 84.30 cm
574	the final image obtained by astronomical telescope is.	A. Erect B. Virtual C. Magnified D. All of these
575	Environmental crisis are also known as	A. Population crisis B. Entropy crisis C. War crisis D. Mass crisis
576	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
577	The least distance of distinct vision for the normal eye is.	A. 15 cm B. 25 cm C. 125 cm D. 25 m
578	When the amplitude of a wave become double, its energy becomes	A. One half B. Two times C. Three times D. Four times
579	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
580	During adiabatic process, which factor remains constant.	A. Entropy B. Pressure C. Momentum D. Power
581	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
582	The amplitude of a vibrating body at resonance in vacuum is	A. Minimum B. Maximum C. Zero D. Infinite
583	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
584	A force applied on a body produces acceleration in	A. Opposite direction B. perpendicular direction C. Its own direction D. In any direction
585	The waves used in radar speed trap are	A. <u>Longitudinal</u> B. Sound wave C. Micro waves

		D. Matter waves
586	The magnification of a convex lens of focal length 5 cm is equal to.	A. 5 B. 6 C. 10 D. 23
587	The direction of angular velocity is determined.	A. Left hands rule B. Head to tail rule C. Right hand rule D. General rule
588	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
589	the velocity of sound at 0 °C is 332 ms ⁻¹ , the velocity of sound at 10 °C will be	A. 337.1 ms ⁻¹ B. 338.1 ,ms ⁻¹ C. 342.1 ms ⁻¹ D. 328.1 ms ⁻¹
590	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
591	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
592	Name the quantity which is a vector.	A. Speed B. Force C. Temperature D. Density
593	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
594	A paratooper moves downward with	A. Zero acceleration B. Constant acceleration C. Positive acceleration D. Negative acceleration
595	Which of the following is evidence of wave nature of light	A. Interference B. Diffraction C. Polarization D. All of these
596	Unit of acceleration is	A. ms ⁻¹ B. ms C. ms ⁻² D. m2s
597	Work is a	A. Scalar quantity B. Vector quantity C. Basic quantity D. None of these
598	The horizontal range of a projectile of 30°with horizontal is same at an angle.	A. 40° B. 45° C. 90° D. 60°
599	In which medium the speed of sound is greater.	A. Oxygen B. Air C. Water D. copper
600	Dark fringes are also called as	A. Minima B. Maxima C. Wave front D. Ray of light
601	The SI Unit of amount of substance is	A. Mole B. Joule C. Volt D. Ohm
602	One revolution is equal to.	A. 90° B. 180° C. 360° D. 270°
603		A. 8 min 20 sec B. 7 min 20 sec

603	Time taken by light to reach from sun to earth is.	A. 8 min 20 sec B. 8 min 20 sec C. 9 min 20 sec D. None of these
604	The subtraction of a vector is equivalent to the addition with	A. Same direction B. Perpendicular direction C. Reversed direction D. All of these
605	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
606	The law of conservation of energy gives us	A. Equation of continuity B. Stock's law C. Bernoulli's equation D. Viscosity
607	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
608	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
609	P.E. of a spring is stored in	A. Spring B. mass C. Both of them D. None of these
610	Entropy remains constant.	A. Isothermal process B. Adiabatic process C. Isochoric process D. Isobaric process
611	The density of blood is nearly equal to.	A. Air B. Milk C. Honey D. Water
612	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
613	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
614	According to first law of thermodynamics the quantity which is conserved.	A. Force B. Momentum C. Energy D. Power
615	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
616	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
617	The number of significant figures with the increases degree of approximation	A. Decreases B. Increases C. Remains unchanged D. None of these
618	the work done in isochoric process is.	A. Constant B. Variable C. Zero D. Depend upon condition
619	A layer over the central core of the jacke is called.	A. Jacket B. Plastic C. Cladding D. Rubber
620	The horizontal component of velocity of projectile	A. Increases B. Decreases C. Remain same D. Decreases and then increases

621	Satellites are the objects that orbit around the	A. Moon B. Sun C. Earth D. Star
622	Young in 1801 performed experiment for the first time about	A. Interference B. Diffraction C. Polarization D. Particle nature of light
623	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
624	the study of nature is classified into	A. Five branches B. Six Branches C. Two Branches D. None of these
625	The artificial satellites are held in orbits by	A. Gravitational force B. Electric force C. Magnetic force D. All of these
626	When body acquires terminal velocity then its acceleration 'a' becomes.	A. $a = 0$ B. $a = g$ C. $a > 0$ D. $a < 0$
627	the louder the sound, the greater will be its.	A. Speed B. Frequency C. Amplitude D. Wave length
628	The distance between two consecutive crests or troughs is called	A. Time period B. Wave length C. Frequency D. Displacement
629	A force of 100 N makes an angle of 60° with y axis, its horizontal component is.	A. 50 N B. 60 N C. 70.7 N D. 86.6 N
630	The blue colour of sky is due to	A. diffraction B. Reflection C. Polarization D. Scattering
631	Sound waves can not be	A. Reflected B. Refracted C. Polarized D. Diffracted
632	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
633	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
634	Which one of the scientist made some contribution to geometrical optics?	A. Pythagoras B. Archimedes C. Euclid D. Plato
635	Kilo watt hour is the unit of	A. Power B. Energy C. Force D. Torque
636	The final image seen through eyepiece in telescope is.	A. Real, enlarge and inverted B. Virtual, enlarge and erect C. Virtual, enlarge and inverted D. In Real, enlarge and erect
637	According to Huygen'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
638	Which of the following is mechanical wave	A. Heat B. Light C. Sound

		D. None of these
639	In red light is used as compare to blue light then fringe spacing.	A. Decreases B. Remain same C. Increases D. Becomes zero
640	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
641	Speed of sound in aluminum at 20 °C is.	A. 3600 m/s B. 5100 m/s C. 5130 m/s D. 3500 m/s
642	Han discovered uranium fissionin	A. 1940 B. 1938 C. 1935 D. 1939
643	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
644	Which one of the following can not be polarized.	A. Ultra violet rays B. Radio waves C. T.V. Waves D. Sound waves
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	Question Image	
647	The efficiency of any heat engine can never be	A. +ve B. 100% C. -ve D. None of these
648	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
649	Metre is the basics unit of	A. Mass B. Force C. Velocity D. Length
650	Two vector can be added by simple arithmetical method when they are at an angle of.	A. 120° B. 90° C. 0° D. 45°
651	Two quantities involved in work are	A. Force and speed B. Force and velocity C. Force and displacement D. Force and acceleration
652	A cycle of petrol engine undergoes	A. Two process B. Three process C. Four process D. single process
653	Sound wave can not be	A. Reflected B. Refracted C. Diffracted D. Polarized
654	The ability of a body to do work is called its	A. Force B. Power C. Capacity D. Energy
655	Frequency 'f' and time period 'T' are related as	
656	The motion of gas molecules is	A. In the same direction B. Random C. Walls of container D. Opposite to each other
		A. Unit vector B. +ve of a vector

657	Question Image	B. -ve of a vector C. Resultant vector D. -ve of a vector
658	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
659	The centre of Newton's fringe is dark due to.	A. Destructive interference B. Diffraction C. Constructive interference D. Polarization
660	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
661	The relation between linear and angular velocity is	
662	A typical rocket consumes fuel about	A. 40000 Kgs-1 B. 30000 Kgs-1 C. 20000 Kg s-1 D. 10000 Kgs-1
663	The Unit of thermodynamic temperature is.	A. C ^o B. F ^o C. K D. None of these
664	The speed of sound in ari at 0 °C is 332 ms ⁻¹ , Then the speed at 40 °C will be	A. 372 ms ⁻¹ B. 356 ms ⁻¹ C. 346 ms ⁻¹ D. 332 ms ⁻¹
665	System Intenational was established in	A. 1967 B. 1960 C. 1971 D. 1940
666	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
667	Which remains constant in an adiabatic process.	A. Volume B. Pressure C. entropy D. temperature
668	The difference between tow molar capacities is equal to.	A. Plank's constant B. General gas equation C. Molar gas constant D. Boltzmann constant
669	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
670	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
671	Supplementary units are.	A. Three B. Two C. Five D. One
672	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
673	Light year is the unit of	A. Distance B. Time C. Light D. Velocity
674	When two identical waves superimposed, which can change.	A. Wave length B. Frequency C. Velocity D. Amplitude
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675	Air blows from	C. Low temperature to high temperature D. High temperature to low temperature
676	The error in speed of sound calculated by Newton at STP is about.	A. 0 % B. 14 % C. 15 % D. 16 %
677	Which is not the essential component of a spectrometer.	A. Collimator B. Telescope C. Turntable D. Microscope
678	Original source of energy for biomass is	A. Earth B. Star C. Moon D. Sun
679	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
680	The dimension of viscosity are	A. $[M^2L^{-2}T^2]$ B. $[M^{-1}LT^{-1}]$ C. $[M^{-1}L^{-1}T]$ D. $[ML^{-1}T^{-1}]$
681	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
682	The number of significant figure in 8.80×10^6 kg is	A. 1 B. 3 C. 6 D. 5
683	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
684	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
685	The uncertainty may occur due to	A. Limitation of an instrument B. Natural variance of the object C. Personal negligence D. All of the above
686	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
687	Critical angle is that incident angle in denser medium for which angle of refraction is.	A. 0° B. 45° C. 90° D. 120°
688	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
689	The branch of Physics which deals with velocities approaches the velocity of light is called	A. Quantum Physics B. Relativistic Mechanics C. Wave Mechanics D. None of these
690	The distance between the consecutive nodes is	
691	The wavelength of X-rays is of the order of.	A. 10^{-8} m B. 10^{-10} m C. 10^{-5} m D. 10^{-4} m
692	The efficiency of a Carnot Heat Engine is 100% if temperature of sink T_2 is.	A. 0°C B. 0°K C. 0°F D. 100°K
693	The trajectory of a projectile is.	A. Circle B. Parabola C. Hyperbola

		C. Hyperbola D. Straight line
694	Venturimeter is used to measure.	A. Speed of fluid B. Pressure of fluid C. Volume of fluid D. Mass of fluid
695	Pascal is the unit of	A. Pressure B. Force C. Tension D. Weight
696	Which quantity of the following is dimensionless.	A. Angular velocity B. Centripetal force C. Angular acceleration D. Angular displacement
697	An oscillating mass-spring system produces	A. Sound waves B. Electromagnetic waves C. Light waves D. Periodic waves
698	At which of the following temperature a body has maximum internal energy.	A. -273°C B. 0 K C. 273 K D. -273 K
699	_____ is bio fuel	A. Water B. Petrol C. Ethanol D. Oil
700	A convex lens can be used as	A. Simple microscope B. Compound microscope C. Telescope D. Spectrometer