

Physics ICS Part 1 Full Book Mcq's Online Test

Sr	Questions	Answers Choice
1	In the absence of air resistance the acceleration of a body will be	A. Uniform B. Variable C. Instantaneous D. None of these
2	For 2.450 no. of significant digits.	A. 2 B. 1 C. 3 D. 4
3	In red light is used as compare to blue light then fringe spacing.	A. Decreases B. Remain same C. Increases D. Becomes zero
4	Frequency range of hearing of cats is.	A. 20-20000 Hz B. 10- 10000 Hz C. 60-20000 Hz D. 60-70000 Hz
5	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
6	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
7	Pressure 'P' of a gas is defined as	A. F/A B. FA C. F/V D. F/D
8	Boltzman constant 'k' has same unit as.	A. Temperature B. Energy C. Entropy D. Pressure
9	When a vector is multiplied by a (-)ve number its direction	A. Remains constant B. Reversed C. Change by 90° D. None of these
10	During adiabatic process, which factor remains constant.	A. Entropy B. Pressure C. Momentum D. Power
11	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
12	The location of near point changes with	A. Age B. Size of the eye C. Sharpness of the eye D. None of these
13	The light energy travels in space as waves was firstly proposed by	A. Maxwell B. Young C. Einsten D. Hydrogen
14	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
15	Han discovered uranium fissionin	A. 1940 B. 1938 C. 1935 D. 1932

16	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
17	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
18	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
19	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
20	Diffraction is a special type of	A. Reflection B. Polarization C. Interference D. Refraction
21	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
22	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
23	Angular velocity determines, How fast or, How slow a body is	A. Accelerating B. Vibrating C. Rotating D. Oscillating
24	The shortest distance between two points is called	A. Distance B. Amplitude C. Displacement D. Is a number
25	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
26	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
27	The Detector in Photo phone is made up of.	A. Cadmium B. Germanium C. Selenium D. Silicon
28	The number of spark plug needed in diesel engine is	A. 0 B. 2 C. 3 D. 4
29	The number of significant figures with the increases degree of approximation	A. Decreases B. Increases C. Remains unchanged D. None of these
30	In sonar we use	A. Sound waves B. Ultrasound waves C. Microwaves D. Radio waves
31	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
32	Stoke's law holds for bodies having.	A. Spherical shape B. Oblong shape C. Rectangular shape D. All shapes
33	The period of the earth is equal to	A. one lunar day B. One astronomical

33	The period of the earth is equal to	B. One astronomical C. One Solar day
34	The temperature scale which is independent of nature of substance is.	A. Thermodynamic scale B. Centigrade scale C. Fahrenheit scale D. Regnault scale
35	When body acquires terminal velocity then its acceleration 'a' becomes.	A. $a = 0$ B. $a = g$ C. $a > 0$ D. $a < 0$
36	The acceleration produced by elastic restoring force is	A. Perpendicular to force B. Opposite to force C. In same direction as force D. Zero
37	A layer over the central core of the jacke is called.	A. Jacket B. Plastic C. Cladding D. Rubber
38	The dimensions of work are.	A. [MLT-1] B. [MLT-2] C. [ML ² T-2] D. [MLT]
39	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
40	The centre of Newton's rings will be	A. Dark B. Bright C. Coloured D. Not visible
41	1 torr in Nm ⁻² is expressed as.	A. 130.5 Nm ⁻² B. 133.3 Nm ⁻² C. 140.2 Nm ⁻² D. 135.2 Nm ⁻²
42	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.
43	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
44	A set of frequencies which are multiples of the fundamental frequency are called.	A. Doppler effect B. Nodal frequencies C. Beat frequencies D. Hamonics
45	The internal energy of system does not depend on	A. Temperature B. Pressure C. Path D. Final and initial state
46	Almost all the raw energy is librated from	A. Heat B. Earth C. Light D. All of these
47	The frictional effect between the different layers of fluid is called	A. Terminal velocity B. Stock's law C. Viscosity D. Surface tension
48	For maximum range the angle of projection must be	A. 30° B. 45° C. 60° D. 90°
49	The SI unit for measuring plane angle is	A. Streadian B. Radian C. Both a and B D. None of these
50	The curve representing an adiabatic process is called.	A. An adiabatic B. An isotherm C. Both of these D. None of these

A. 40000 Kgs-1
B. 20000 Kgs-1

51	A typical rocket consumes fuel about	B. 30000 Kgs-1 C. 20000 Kg s-1 D. 10000 Kgs-1
52	If a mass of a body is doubled, then acceleration becomes.	A. Double B. Half C. One fourth D. Constant
53	Newton's laws of motion were published in	A. 1587 B. 1687 C. 1787 D. 1887
54	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
55	Moment of inertia is measure din	A. Kg m2 B. Kg m-2 C. Rad s-1 D. Joule second
56	Example of thin film is.	A. Soap burble B. convex lens C. Concave lens D. Glass plate
57	The unit of energy is same as that of	A. Power B. Work C. Torque D. Density
58	Fringe spacing is inversely proportional to.	A. Wave length B. Slit separation C. Distance between the slit and screen D. Frequency of light
59	The dimension of viscosity are	A. [M2L-2T2] B. [M-1LT-1] C. [M-1L-1T] D. [ML-1T-1]
60	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
61	An oscillating mass-spring system produces	A. Sound waves B. Electromagnetic waves C. Light waves D. Periodic waves
62	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
63	The speed \velocity of sound is greatest in.	A. Air B. Steel C. Ammonia D. Water
64	Sound waves are	A. Electromagnetic waves B. Transverse waves C. Compressional waves D. Matter waves
65	The rate of change of momentum is equal to	A. Impulse B. Torque C. Velocity D. Force
66	A frame of reference stationed at the earth is an	A. Inertial frame B. None internal frame C. Accelerated frame D. Laboratory frame
67	By increasing the amount of stretch in spring the force exerted will	A. Increase B. One watt C. One erg D. One joule
68	The accented 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. $2.99 \times 10^{10} \text{ m - sec}^{-1}$ D. $2.99 \times 10^{12} \text{ m - sec}^{-1}$

		<p>C. $2.99 \times 10^8 \text{ km} \cdot \text{sec}^{-1}$</p> <p>D. $2.99 \times 10^8 \text{ m} \cdot \text{h}^{-1}$</p>
69	Height of geo stationary orbit of the satellite above the earth is.	<p>A. 300 km</p> <p>B. 250 km</p> <p>C. 400 km</p> <p>D. None of these</p>
70	The wavelength of fundamental note in one end closed pipe in term of length 'l' of pipe is.	<p>A. $4l$</p> <p>B. $2l$</p> <p>C. l</p> <p>D. $1/4 l$</p>
71	The minimum number of correctly positioned communication satellites to cover whole populated earth is.	<p>A. 2</p> <p>B. 3</p> <p>C. 100</p> <p>D. 200</p>
72	Sound wave can not be	<p>A. Reflected</p> <p>B. Refracted</p> <p>C. Diffracted</p> <p>D. Polarized</p>
73	When a body is vibrating its displacement from mean position	<p>A. Remains constant</p> <p>B. Changes with time</p> <p>C. Become(-)ve</p> <p>D. None of these</p>
74	The Carnot cycle can be shown by which graph	<p>A. P - T graph</p> <p>B. P - V Graph</p> <p>C. V- T graph</p> <p>D. PV -T graph</p>
75	Time taken by light to reach from moon to earth is	<p>A. 1 min 20 sec</p> <p>B. 8 min 20 sec</p> <p>C. 3 min 20 sec</p> <p>D. 2 min 20 sec</p>
76	The error in a certain measurement occurs due to	<p>A. Negligence of a person</p> <p>B. In appropriate technique</p> <p>C. Faulty Appraatus</p> <p>D. All of rhe above</p>
77	The unit of work in base unit is	<p>A. $\text{Kg m}^{-1} \text{sec}^{-2}$</p> <p>B. Kgm sec^{-2}</p> <p>C. $\text{Kgm}^2 \text{sec}^{-1}$</p> <p>D. $\text{Kgm}^{-1} \text{sec}^{-1}$</p>
78	The energy processes, we use are	<p>A. Efficient</p> <p>B. Not efficient</p> <p>C. Reversible</p> <p>D. None of these</p>
79	Value of triple point of water is given as.	<p>A. Zero K</p> <p>B. 100 K</p> <p>C. 273.16 K</p> <p>D. 373.16 K</p>
80	Average translational K.E. of molecules for an ideal gas is given as	<p>A. $1/2 KT$</p> <p>B. KT</p> <p>C. $2/3 KT$</p> <p>D. $3/2 KT$</p>
81	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>
82	Metre is the basics unit of	<p>A. Mass</p> <p>B. Force</p> <p>C. Velocity</p> <p>D. Length</p>
83	A cycle of petrol engine undergoes	<p>A. Two process</p> <p>B. Three process</p> <p>C. Four process</p> <p>D. single process</p>
84	Experimentation and practical verification was fist indroduced by	<p>A. The Muslim Scientists</p> <p>B. The Greek philosopher</p> <p>C. The European scientsts</p> <p>D. None of these</p>
85	Which is nooptically active	<p>A. Sugar</p> <p>B. Tartaric acid</p> <p>C. Water</p> <p>D. Sodium chloride</p>

86	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
87	Horizontal range is maximum when the angle of projectile is.	A. 0° B. 30° C. 45° D. 60°
88	the example of mechanical waves is	A. Water waves B. Infrared waves C. Radio waves D. Ultraviolet waves
89	The SI unit of work is	A. Newton B. Joule C. Mol D. Calorie
90	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
91	When two identical travelling waves are superimposed, velocity of resultant wave.	A. Decreases B. Increases C. Remain same D. Becomes zero
92	The efficiency of any heat engine can never be	A. +ve B. 100% C. -ve D. None of these
93	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
94	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%
95	When a body moves in circular motion, the angle between linear and angular velocity is.	A. 180° B. 90° C. 60° D. 75.3°
96	In vibrating string, the points where the amplitude is maximum are called.	A. Nodes B. Antinodes C. Troughs D. Crests
97	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
98	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
99	The entropy of the universe with passage of time is.	A. Increases B. Decreases C. Remain constant D. Increases and decreases
100	the acceleration along x-axis direction in case of projectile is.	A. Zero B. Equal to gravity C. Maximum D. Constant
101	The unit of rotational K.E. is	A. rAD/SEC B. Js C. J D. Kgm ²
102	Change of momentum is equal to	A. Force B. Tension C. Impulse D. Pressure
103	If the radius of droplet becomes half, then its terminal velocity will become.	A. Double B. Half C. One fourth

		<p>C. Same as before</p> <p>D. Remains same</p>
104	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.	<p>A. 1000 N</p> <p>B. 2000 N</p> <p>C. 3000 N</p> <p>D. 0 N</p>
105	When two identical waves superimposed, which can change.	<p>A. Wave length</p> <p>B. Frequency</p> <p>C. Velocity</p> <p>D. Amplitude</p>
106	Dot product of vector with itself is.	<p>A. Zero</p> <p>B. 2 A</p> <p>C. A^2</p> <p>D. A</p>
107	The maximum range of projectile is 100 km, Take $g=10 \text{ ms}^{-2}$, the initial velocity of the projectile will be.	<p>A. 1000 kms-1</p> <p>B. 1 kms-1</p> <p>C. 10 kms-1</p> <p>D. 100 kms-1</p>
108	the work done in isochoric process is.	<p>A. Constant</p> <p>B. Variable</p> <p>C. Zero</p> <p>D. Depend upon condition</p>
109	The horizontal range of a projectile of 30° with horizontal is same at an angle.	<p>A. 40°</p> <p>B. 45°</p> <p>C. 90°</p> <p>D. 60°</p>
110	The dimensional of potential energy per unit volume are same as that of.	<p>A. Work</p> <p>B. Pressure</p> <p>C. Speed</p> <p>D. Density</p>
111	The shape of trajectory of short range projectile is	<p>A. Straight line</p> <p>B. Circle</p> <p>C. Elliptical</p> <p>D. Parabolic</p>
112	The SI unit of force is.	<p>A. Dyne</p> <p>B. Joule</p> <p>C. Volt</p> <p>D. Newton</p>
113	Energy dissipated usually appears as	<p>A. P.E.</p> <p>B. Heat Energy</p> <p>C. Chemical energy</p> <p>D. Nuclear Energy</p>
114	At what speed the momentum and kinetic energy of a body having the same.	<p>A. 1 ms-1</p> <p>B. 2 ms-1</p> <p>C. 4 ms-1</p> <p>D. 8 ms-1</p>
115	The SI unit of power is	<p>A. Joule</p> <p>B. Newton</p> <p>C. Watt</p> <p>D. Kilowatt</p>
116	A swing is good example of	<p>A. Resonance</p> <p>B. Vibration</p> <p>C. Time period</p> <p>D. Oscillation</p>
117	[LT-2] is dimensional formula for	<p>A. Acceleration</p> <p>B. Velocity</p> <p>C. Force</p> <p>D. Momentum</p>
118	The dimensional unit of impulse is.	<p>A. [MLT]</p> <p>B. [MLT-1]</p> <p>C. [ML-1T-1]</p> <p>D. [M-1L-1T-1]</p>
119	S.I Unit of pressure of gas is.	<p>A. Nm</p> <p>B. N.m</p> <p>C. N^2/m</p> <p>D. N^3m</p>
120	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.	<p>A. 10 cm</p> <p>B. 100 cm</p> <p>C. 1000 cm</p> <p>D. 5 cm</p>
		<p>A. Evaporation</p>

121	Bio mass is converted into fuel by	B. Fermentation C. Reflection D. Scattering
122	The produce oscillation, body is pulled away from its	A. Mean position B. Extreme position C. Both a and b D. None of these
123	The unit of solar light inversely is	A. Watt B. kW m ⁻² C. Watt m ⁻² D. 1 m ²
124	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
125	Huygen's proposed, light energy travels in space from source in	A. 1578 B. 1678 C. 1778 D. 1868
126	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
127	The SI unit of product of pressure and volume is.	A. _{Watt} B. Joule C. Pascal D. Newton
128	Which is the example of vector quantity	A. Torque B. Speed C. Density D. Work
129	The law of conservation of energy gives us	A. Equation of continuity B. Stock's law C. Bernoulli's equation D. Viscosity
130	When two waves of same frequency travel in opposite direction, the phenomenon will be	A. Diffraction B. Stationary waves C. Polarization D. Interference
131	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
132	The waves used in radar speed trap are	A. <u>Longitudinal</u> B. Sound wave C. Micro waves D. Matter waves
133	Bunsen burner works on the principle of.	A. Venturi effect B. Terricilli's effect C. Bernoulli's effect D. None of these
134	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
135	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
136	At which of the following temperature a body has maximum internal energy.	A. -273 ^o</sup>C B. 0 K C. 273 K D. -273 K
137	The pitch of sound deepens upon	A. Intensity of sound B. Loudness of sound C. Wavelength of sound D. Frequency of sound
138	The ballistic missiles are used only for	A. Long range B. Short range C. Medium range D. Constant range

139	Which one of the followign Muslim mathmatisation determined the earths circumference.	A. Al Beruni B. Ibn Sina C. Al Khawrizmi D. None of these
140	The equations of motion hold good for	A. Variable acceleration B. Uniform acceleration C. Centripetal acceleration D. All of these
141	Two vector can be added by simple arithmetical method when they are at an angle of.	A. 120° B. 90° C. 0° D. 45°
142	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
143	The dimension of power is	A. MLT-1 B. ML ² T-2 C. ML ² T2 D. ML ² T-3
144	Oil film floating on water exhibits colours due to	A. Interference B. Diffraction C. Polarization D. All of these
145	Vector has both of its components are negative lies in	A. 1st quadrant B. 2nd quadrant C. 3rd quadrant D. 4th quadrant
146	Image formed by a concave lens is	A. Real B. Virtual C. Erect D. None of these
147	Second pendulum has a time period	A. 1 sec B. 3 sec C. 2 sec D. 4 sec
148	According to first law of thermodynamics the quantity which is conserved.	A. Force B. Momentum C. Energy D. Power
149	Errors due to incorrect design of a device are called	A. Random Error B. Systematic Error C. Physical Error D. None of these
150	The ratio of size of image and size of object is	A. Focal length B. Magnification C. Resolving power D. Principle focus
151	Speed of sound in copper is	A. 38000 ms ⁻¹ B. 3600 ms ⁻¹ C. 3500 ms ⁻¹ D. 3400 ms ⁻¹
152	P.E. of a spring is stored in	A. Spring B. mass C. Both of them D. None of these
153	Physical quantiaties are divided into	A. Two Categories B. Six categories C. Three categories D. None of these
154	One complete round trip of a vibrating body is called.	A. Frequency B. Time period C. Vibration D. Amplitude
155	Two waves of same frequency and moving in the same direction produces.	A. Interference B. Diffraction C. Beats D. Stationary waves
156	Total change in momentum of an isolated system is	A. Always (+) ve B. Always (-) ve C. Has maximum value D. None of these

		D. Zero
157	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
158	No of spark plugs needed in the diesel engine are.	A. 0 B. 1 C. 2 D. 3
159	Work is a	A. Scalar quantity B. Vector quantity C. Basic quantity D. None of these
160	Symbolically solid angle is represented as	A. Sr B. rad C. 0 D. cd
161	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
162	For angular momentum of system to remain constant, external torque should be.	A. Small B. Large C. Zero D. None
163	Radar system is an application of.	A. Chemical effect B. Electric effect C. Magnetic effect D. Doppler's effect
164	___ will travel faster than other through an optical fibre.	A. Ultraviolet light B. Visible light C. Infrared light D. White light
165	Which one of the scientist made some contribution to geometrical optics?	A. Pythagoras B. Archimedes C. Euclid D. Plato
166	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
167	The formula of centripetal acceleration is	
168	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
169	The relation between the speed and hoop can be written as	A. 2 B. 4 C. 1/2 D. 1/4
170	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
171	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
172	The first person who attempted to measure the speed of light was.	A. Michelson B. Hygen's C. Galileo D. Ability
173	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
174	A quantity which indicates the state and direction of a vibrating body is known as	A. Time period B. Amplitude

		C. Phase D. Frequency
175	Newton's rings are formed due to phenomenon of.	A. Interference B. Dispersion C. Diffraction D. Polarization
176	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
177	Rate of change of displacement is called	A. Speed B. Velocity C. Kinetic energy D. None of these
178	Close orbiting satellites orbit the earth at a height of about	A. 400 km B. 4000 km C. 400 m D. 400 cm
179	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
180	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
181	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 ⁻² B. 2 ms ⁻² C. 5 ms ⁻² D. 10 ms ⁻²
182	A force applied on a body produces acceleration in	A. Opposite direction B. perpendicular direction C. Its own direction D. In any direction
183	Time period of geostationary satellite of radius 'R' is	A. 1 hour B. 48 min C. 1 day D. 1 month
184	If 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
185	A wheel of radius 50 cm having an angular speed of 1 rad/s has linear speed.	A. 1.5 m/s B. 3.5 m/s C. 2.5 m/s D. 4.5 m/s
186	A communication satellite is used to reflect the signal of.	A. Microwaves B. Radio waves C. γ rays D. x-rays
187	Who did give the correct formula for the speed of sound in air?	A. Boyle B. Laplace C. Newton D. Einstein
188	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
189	Apparent weight of a man in an upward accelerated lift will	A. Increases B. Decreases C. Remain same D. Increases then decreases
190	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. At a large distance from lens
191	One foot is equal to	A. 31.90 cm B. 30.48 cm C. 30.84 cm D. 84.30 cm
		A. Hemoglobin B. Starch

192	X-ray diffraction has been very useful in determining the structure of	B. Stars C. Galaxies D. Stones
193	The angular acceleration $\alpha =$	
194	The work done will be maximum when angle between F and d .	A. 180° B. 0° C. 90° D. 60°
195	Which one is renewable source of energy.	A. Coal B. Uranium C. Biomass D. Natural gas
196	The commercial unit of electric energy is	A. Kilo watt hour B. watt C. Watt hour D. Kilo Watt
197	This is used for	A. Co-efficient of friction B. Co-efficient of expansion C. Co-efficient of viscosity D. Co-efficient of contraction
198	The process followed by Newton for the determination of speed of sound in air is	A. Adiabatic B. Isothermal C. Isobaric D. Isochoric
199	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
200	In reversible process the entropy of system.	A. Remain constant B. Decrease C. Increase D. Becomes zero
201	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
202	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
203	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
204	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
205	2 radian = ____	A. 2 m B. 4 m C. 57.3 m D. 114.6 m
206	Kg ms^{-1} can also be written as	A. Nm B. Ns C. Ns^{-1} D. Js
207	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
208	The ability of reveal the minor details of an object under examination is called.	A. Resolving power B. Magnification C. Scattering D. Reflection
209	Force acting on the piston to move outward is.	A. Compressive stoke B. Power stoke C. All stoke D. Exhaust stoke
210		A. Isothermal process B. Isochoric process

210	Cloud formation in atmosphere is an example of.	B. Isoentropic process C. Adiabatic process D. Isobaric process
211	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
212	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
213	Oscillation of shock absorber of a car is practical example of.	A. simple harmonic motion B. Forced oscillation C. Damped oscillation D. Undamped oscillation
214	The ability of a body to do work is called its	A. Force B. Power C. Capacity D. Energy
215	The diver spins faster when moment of inertia becomes.	A. smaller B. Greater C. Constant D. Zero
216	No body begins to move or comes to rest of itself was given by	A. Newton B. Pascal C. Bernoulli D. Bu Ali Sina
217	Entropy remains constant.	A. Isothermal process B. Adiabatic process C. Isochoric process D. Isobaric process
218	In S.H.M, the acceleration of the body is directly proportional to	A. Weight of body B. Applied force C. Amplitude D. Displacement
219	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
220	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
221	The frequency of waves produced in microwave oven is	A. 1435 Hz B. 2450 MHz C. 1860 MHz D. 2850 Hz
222	The portion of the wave above mean level is called.	A. Node B. Antinode C. Crest D. Trough
223	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
224	Not change in entropy of a system after one complete Carnot cycle is.	A. Positive B. Negative C. Zero D. None of these
225	No spark plug is needed in the	A. Petrol engine B. Diesel engine C. Gas engine D. Water engine
226	When the projectile reaches the highest point of trajectory, the vertical component of velocity becomes.	A. Small B. Zero C. Maximum D. Vi cos
227	The weight of the body at the centre of earth is	A. Maximum B. Minimum C. Zero D. None

		D. Infinite
228	A diatomic gas molecules has	A. Translational energy only B. Rotational energy only C. Vibrational energy only D. All translational, Rotational and vibrational energy
229	Sodium chloride in a flame gives	A. Green light B. White light C. Red light D. Yellow light
230	The SI unit of intensity of light is	A. Joule B. Mole C. Candila D. Kilomole
231	The Unit of thermodynamic temperature is.	A. $^{\circ}\text{C}$ B. $^{\circ}\text{F}$ C. K D. None of these
232	The subtraction of a vector is equivalent to the addition with	A. Same direction B. Perpendicular direction C. Reversed direction D. All of these
233	Which one is true for isothermal process.	A. $Q = 0$ B. $W = 0$ C. $Q = W$ $\Delta U = 0$ D. None of these
234	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
235	The product of rotational inertial 'I' and angular velocity 'w' is equal to.	A. Torque B. Linear momentum C. Angular momentum D. Force
236	Interplaner distance can be determined by	A. Newton's rings B. Bragg's law C. Diffraction pattern D. Interferometer
237	Time period of simple pendulum depends upon	A. Mass of pendulum B. Weight of pendulum C. Length of pendulum D. Shape of pendulum
238	The concentration of red blood cells in the blood is nearly.	A. 40% B. 60% C. 25% D. 50%
239	Light waves emitted from a source spread in	A. Specific direction B. All direction C. Upward direction D. None of these
240	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
241	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
242	Angle between ray of light and wave front is	A. 0° B. 60° C. 90° D. 120°
243	Blood has density equal to that of	A. Mercury B. Sodium C. Honey D. Water
244	The flow of a fluid is of	A. One type B. Two types C. Three types D. Four type
		A. 20 Nm

245	If $r = 5\text{ m}$ and $f = 4\text{ N}$ are along same direction, then torque is	B. 5 Nm C. 10 Nm D. Zero
246	Head to tail rule is used for	A. Addition of vectors B. Subtraction of vectors C. Multiplication of vectors D. Division of vectors
247	The angle between x-axis, y-axis and z-axis is	A. 45° B. 60° C. 75° D. 90°
248	In rotational motion the analogous of mass is	A. Angular acceleration B. Torque C. Moment of inertia D. Angular momentum
249	The focal length of a concave lens is always	A. +ve B. -ve C. Zero D. None of these
250	the height of the geostationary satellite above the equator is.	A. 35000 km B. 36000 km C. 34000 km D. 33000 km
251	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
252	Bright fringes are also called as	A. Minima B. Maxima C. Wave front D. Ray of light
253	Soap film in sunlight appears coloured due to.	A. Dispersion of light B. Diffraction of light C. Scattering of light D. Interference of light
254	The distance covered by wave in 1 sec is	A. wavelength B. Wave number C. Wave speed D. Frequency
255	Multimode step index fiber is useful for.	A. Long distance B. Short distance C. Very long distance D. Infinite distance
256	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
257	When Newton's ring are seen through the transmitted light, then central spot is.	A. Dark B. Blue C. Bright D. Red
258	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. $4v$
259	Receptors are placed in new system at distance of.	A. 30 km B. 50 km C. 80 km D. 100 km
260	Bending of light around the edges of an obstacle is called.	A. Refraction B. Polarization C. Interference D. Diffraction
261	When the amplitude of a wave is increased to double its energy.	A. Remains the same B. Increases 4 times C. Increases by two times D. Decreases by half
262	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

263	The speed of sound increases with the increase of in	A. Pressure B. Volume C. Temperature D. Density
264	The fundamental quantities 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
265	Biomass is a potential source of	A. Renewable energy B. Non renewable energy C. Both a and b D. Tidal energy
266	The number of significant figures with the increase in accuracy of the measuring instrument	A. Decreases B. Remains unchanged C. Increases D. None of these
267	Question Image	
268	Kilo watt hour is the unit of	A. Power B. Energy C. Force D. Torque
269	The measure of hotness or coldness of a substance is.	A. Temperature B. Heat C. Internal energy D. Energy
270	Weight of a 60 kg man in moving elevator with constant acceleration of $1/2 g$	A. Zero B. 300 N C. 600 N D. 200 N
271	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
272	Inertia may be expressed in	A. Kg B. Newton C. Watt D. Joule
273	The final image obtained by astronomical telescope is.	A. Erect B. Virtual C. Magnified D. All of these
274	In stationary waves, the particle velocity at nodes is	A. Minimum B. Maximum C. Zero D. Constant
275	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
276	The acceleration of a projectile along x axis is.	A. Zero B. Increase C. Decrease D. Equal to 'g'
277	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. 2k C. k/2 D. 4k
278	If a body revolves under centripetal force its angular acceleration is	A. Non zero B. Variable C. Increasing D. Zero
279	The value of angular momentum is maximum when θ is	A. 90° B. 60° C. 75° D. 45°
280	The overlapping of physics and other fields gave birth to	A. Interdisciplinary areas of physics B. Areas of Physics C. Areas of science D. All of these

281	The motion of a body moving along a circular path is called.	A. Translational motion B. Angular motion C. Vibratory motion D. Linear motion
282	Number of seconds in a day is	A. 9000 sec B. 3600 sec C. 86400 sec D. 43200 sec
283	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
284	A stretched string 2 m long and it has 2 nodes of stationary waves then the wavelength is	A. 4 m B. 2 m C. 3 m D. 1 m
285	In case of point source the shape of wave front is	A. Circular B. Spherical C. Elliptical D. Square
286	The direction of vector in space is specified by	A. 1- angle B. 2- angle C. 3- angle D. 4 - angle
287	The Science of physics based on	A. Fundamental Quantities B. Hypothesis C. Experiments and measurement D. Only definition
288	The mathematical expression for the restoring force is.	A. $F = kx$ B. $F = ma$ C. $F = dp/dt$ D. $F = -kx$
289	The branch of physics which deals with the properties of gravitational field, electromagnetic field and nuclear field is called.	A. Aerodynamics B. Field theory C. Acoustics D. Hydrodynamics
290	Which one is non renewable source of energy.	A. Hydro electric B. Bio mass C. Tides D. Oil
291	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
292	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. $\frac{1}{2} kx$
293	Original source of energy for biomass is	A. Earth B. Star C. Moon D. Sun
294	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
295	Question Image	
296	Which one of the following can not be polarized.	A. Ultra violet rays B. Radio waves C. T.V. Waves D. Sound waves
297	Question Image	A. Unit vector B. +ve of a vector C. Resultant vector D. -ve of a vector
298	The dimension of pgh has same as that of	A. Work B. Energy C. Pressure D. Mass
		A. Low

299	Pressure of fluid will be low where speed of fluid is.	B. Zero C. High D. Constant
300	Longitudinal waves do not exhibit	A. Reflection B. Refraction C. Polarization D. Diffraction
301	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
302	One revolution is equal to.	A. 90° B. 180° C. 360° D. 270°
303	The fringe spacing increases if we use.	A. Yellow light B. Green light C. Blue light D. Red light
304	The terminal velocity can be obtained by using	A. Newton's law B. Stock's law C. Gauss's law D. None of these
305	100 radians are equal to.	A. 57.3° B. 75.3° C. 573° D. 5730°
306	Half wavelength corresponds to	A. 0° B. 90° C. 180° D. 360°
307	The optical fibre is covered for protection by	A. Glass jacket B. Plastic jacket C. Steel jacket D. Diamond jacket
308	An oil film on water surface shows colour due to.	A. Diffraction B. Interference C. Polarization D. Dispersion
309	Efficiency of steam locomotive is.	A. 8% B. 10% C. 9% D. 7%
310	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
311	The ideal gas law is.	A. $PV = Nk$ B. $P = NkT$ C. $PV = nRT$ D. $P = nRT$
312	For 0.0036 no. of significant digits	A. 1 B. 3 C. 2 D. 4
313	For a diatomic gas $C_v = 5R/2$ then γ for this gas is.	A. $5/7$ B. $4/35$ C. $7/5$ D. $35/4$
314	Total confined light is obtained by	A. Total internal reflection B. Refraction of light C. Diffraction D. Polarization
315	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
316	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

317	In case of point source the shape of wave front is.	A. Plane B. spherical C. Circular D. Eliptical
318	Critical angle is that angle of incident ofr which angle of refraction is.	A. 90° B. 45° C. 42° D. 24°
319	A heat engine operates between the temperature 1000 K and 400 K, Its efficiency is.	A. 100% B. 70% C. 60% D. 50%
320	The basic units in system international units are	A. Theree B. Seven C. Five D. Two
321	The apparent change in the pitch of sound due to relative motion is called.	A. Carnot theorem B. Interference C. Doppler effect D. Beats
322	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
323	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. $f/V2$
324	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
325	Engineering physics, Astrophysics,Bio Physics and Geophysics are	A. Branches of Physics B. Branches of Chemistry C. Applied Physics D. None of these
326	Critical angle is that incident angle in denser medium for which angle of refraction is.	A. 0° B. 45° C. 90° D. 120°
327	Pascal is the unit of	A. Pressure B. Force C. Tension D. Weight
328	The least distance of distinct vision for the normal eye is.	A. 15 cm B. 25 cm C. 125 cm D. 25 m
329	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
330	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
331	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
332	The slope of velocity time graph shows	A. Total distance covered B. Average acceleration C. Instantaneous acceleration D. Torque
333	the study of nature is classified into	A. Five brancehs B. Six Branches C. Two Branches D. None of these
334	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 dvne

335	Minimum number of unequal forces whose vector sum can be zero are.	A. 5 B. 4 C. 3 D. 2
336	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
337	The moment of inertia is analogue to	A. Mass B. Weight C. Torque D. Force
338	The speed of sound is greater in solids due to their high.	A. Density B. Pressure C. Temperature D. Elasticity
339	Which of the following is mechanical wave	A. Heat B. Light C. Sound D. None of these
340	The motion of gas molecules is	A. In the same direction B. Random C. Walls of container D. Opposite to each other
341	Usually the x-axis is taken as	A. Vertical axis B. Horizontal axis C. +ve axis D. -ve axis
342	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
343	The light signal in Opticla fiber must be regenerated by advice called.	A. Regenerator B. Generator C. Repeater D. Diode
344	The phenomenon of polarization of light reveals that sun light is	A. Longitudinal waves B. Transverse wave C. Electromagnetic waves D. Monochromatic wave
345	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
346	Angular displacement is	A. Scalar quantity B. Vector quantity C. Basic quantity D. None of these
347	Law of physics expressed in term of	A. Base quantites B. Derived quantities C. a and b D. None of these
348	Which is the process in which temperature of the system remains constant.	A. Adiabatic process B. Isochoric process C. Isothermal process D. Isobaric process
349	An ideal reversible heat engine has	A. 100% efficiency B. Highest efficiency C. 80% D. 90%
350	With increase of temperature, speed of sound.	A. Remains constant B. Becomes zero C. Decreases D. Increases
351	The focal length of convex lens	A. Negative B. Positive C. small D. Large
352	Intensity of light depend on	A. Wave length B. Amplitude C. Velocity

		C. Velocity D. Frequency
353	Torricelli's theorem is given by	
354	Satellites are the objects that orbit around the	A. Moon B. Sun C. Earth D. Star
355	The to and fro motion of a body is called	A. Linear motion B. Rotational motion C. Vibratory motion D. None of these
356	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
357	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
358	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
359	The number of significant figure in 8.80 x 10 ⁶ kg is	A. 1 B. 3 C. 6 D. 5
360	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
361	The blue colour of sky is due to	A. diffraction B. Reflection C. Polarization D. Scattering
362	The amplitude of a vibrating body at resonance in vacuum is	A. Minimum B. Maximum C. Zero D. Infinite
363	The tides raise in the sea roughly	A. Once a day B. Twice a day C. Three a day D. Four time a day
364	The relation between linear and angular velocity is	
365	A device based upon the thermodynamics property of matter is called.	A. Calorimeter B. Heat engine C. thermometer D. Voltmeter
366	Direction of angular acceleration is always along	A. x-axis B. y -axis C. z-axis D. The axis of rotation
367	Environmental crisis are also known as	A. Population crisis B. Entropy crisis C. War crisis D. Mass crisis
368	The efficiency of diesel engine is about	A. 25 % to 30% B. 35% to 40% C. 40% to 50% D. 50% to 60%
369	If heat engine absorb 400 J and rejects 200 J heat energy, its efficiency will be.	A. 25% B. 50% C. 70% D. 100%
370	A bat finding its correct location by sending	A. Matter waves B. Ultrasonic waves C. Infrasonic waves D. electromagnetic waves
371	A force of 100 N makes an angle of 60° with X- Axis. its horizontal component is	A. 50 N B. 60 N

371	A force of 100 N makes an angle of 60° with Y- Axis, its horizontal component is.	C. 70.7 N D. 86.6 N
372	the length of simple pendulum of time period 1 second is	A. 2 m B. 1 m C. 0.5 D. 0.25 m
373	The direction of angular velocity is determined.	A. Left hands rule B. Head to tail rule C. Right hand rule D. General rule
374	The diameter of a lens is called	A. Focal length B. Aperture C. Principle axis D. Centre
375	Venturimeter is used to measure.	A. Speed of fluid B. Pressure of fluid C. Volume of fluid D. Mass of fluid
376	Unit of acceleration is	A. ms ⁻¹ B. ms C. ms ⁻² D. m2s
377	When the amplitude of a wave become double, its energy becomes	A. One half B. Two times C. Three times D. Four times
378	Transformation of heat other forms of energy is discussed in	A. Thermal physics B. Thermodynamics C. Atomic physics D. Nuclear physics
379	Which material has maximum viscosity	A. Glycerin B. Plasma C. Methanol D. Water
380	Pi radian is equal to.	A. 0 ^o B. 90 ^o C. 180 ^o D. 57.3 ^o
381	The law of conservation of mass gives us	A. Equation of continuity B. Stock's law C. Bernoulli's equation D. Viscosity
382	The artificial satellites are held in orbits by	A. Gravitational force B. Electric force C. Magnetic force D. All of these
383	Which of the following is the derived quantity.	A. Time B. Length C. Area D. Mass
384	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
385	An immediate source of energy for our body is:	A. mango B. Glucose C. mushroom D. meat
386	The speed of sound in air does not depend upon	A. Temperature B. Pressure C. Density D. Medium
387	the shortest distance between two points is called.	A. Speed B. Acceleration C. Distance D. Displacement
388	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

389	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
390	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
391	The SI unit of angular displacement is.	A. Degree B. Revolution C. Radian D. Rotation
392	As we go from pole to equator of earth, the value of 'g'	A. Increase B. Decrease C. Remain constant D. Zero
393	Food rich in proteins is:	A. potato B. grapes C. vegetables D. bread
394	Time period of simple pendulum only depends on	A. Mass B. Amplitude C. Density D. Length
395	Turning of radio is example of.	A. Mechanical resonance B. Electrical resonance C. Physical resonance D. Biological resonance
396	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
397	The angle between circumference of a circle and center is	
398	The SI Unit of amount of substance is	A. Mole B. Joule C. Volt D. Ohm
399	Question Image	
400	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
401	The frictional force is	A. Conservative force B. Non conservative force C. Electric force D. Magnetic force
402	The dot product of two vectors A and B will be zero, if angle between A and B is	A. Zero B. 30° C. 90° D. 180°
403	The work done is isochoric process is.	A. Constant B. Variable C. Zero D. Depend upon condition
404	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
405	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
406	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
407	The direction of null vector can be	A. (+) ve B. (-) ve C. Arbitrarv

		D. Zero
408	SI unit of work	A. Newton B. Watt C. Pascal D. Joule
409	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
410	The magnitude of A will be	A. Zero B. A^2 C. 1 D. A
411	Question Image	
412	Maximum number of components of a vector may be	A. Infinite B. One C. two D. three
413	The unit of coefficient of viscosity in S.I system	A. $\text{Kg}^{-1} \text{ms}^{-1}$ B. $\text{Kg m}^{-1} \text{s}^{-1}$ C. $\text{kg}^{-1} \text{m}^{-1}$ D. Kg ms^{-1}
414	The motion and rest are	A. Absolute B. Relative C. Mutual D. All of these
415	Information carrying capacity of optical fibre called.	A. Capacity B. Band width C. Immunity D. Ability
416	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
417	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
418	Salter's duck was invented by	A. Newton B. Einstein C. Prof Salter D. Maxwell
419	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.
420	The angle of projection for which its maximum height and horizontal range are equal	A. 46° B. 56° C. 66° D. 76°
421	What would encourage trade between two countries	A. Different tax system B. Frontier checks C. National currencies D. reduced tariffs
422	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
423	A stationary waves is established in 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
424	If an object is placed within the focal length of a convex lens, its image is formed.	A. Real B. Inverted C. Virtual D. Smaller than object
		A. Longitudinal waves B. transverse waves

425	Crests and trough are formed in.	B. Transverse waves C. Stationary waves D. Compression waves
426	The magnifying power of a convex lens of focal length 10 cm is	A. 7 B. 9.6 C. 11 D. 3.5
427	Speed of sound in vacuum is	A. 280 ms ⁻¹ B. 332 ms ⁻¹ C. 333 ms ⁻¹ D. Zero ms ⁻¹
428	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
429	The product of time period and frequency is.	A. Zero B. 1 C. 2 D. 3
430	The unsteady flow of a fluid is called	A. Stream line B. Turbulent flow C. Average flow D. Viscous flow
431	The dimension of power are	A. [ML ² T ⁻³] B. [ML ² T ⁻²] C. [MLT ⁻¹] D. None of these
432	The periodic variations of sound between maximum and minimum loudness are called.	A. Doppler's effect B. reflection C. Laplace correction D. Beats
433	The dimensions of angular velocity are	A. [LT ⁻¹] B. [LT ⁻²] C. [T ⁻¹] D. [L ⁻¹ T ⁻¹]
434	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
435	Rate of change of velocity is called	A. Speed B. Acceleration C. Displacement D. Torque
436	First law of thermodynamics can be defined by the equation	
437	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
438	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
439	In the absence of external force, the change in momentum is.	A. Zero B. Constant C. Decreasing D. Increasing
440	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
441	The frequency of 2nd pendulum is	A. 0.5 Hz B. 1 Hz C. 1.5 Hz D. 2 Hz
442	The number 64.350 is rounded off as	A. 64.4 B. 64.46 C. 63.35 D. 64.36
443	Physics bases on Newtonian mechanics is called	A. astrophysics B. Modern Physics C. Classical Physics

444	The SI units of solid angle is	A. Steradian B. Radian C. Degree D. None of these
445	The force and torque are analogous to	A. Velocity B. Mass and weight C. Moment of Inertia D. Each other
446	The distance between two consecutive crests of troughs is called	A. Time period B. Wave length C. Frequency D. Displacement
447	Frequency 'f' and time period 'T' are related as	
448	Supplementary units are.	A. Three B. Two C. Five D. One
449	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
450	The system international SI built up from	A. Derived Units B. Supplementary units C. Basic Units D. All of these
451	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
452	The fluid is said to be incompressible, if its density is.	A. Zero B. Very high C. Constant D. Very small
453	The weight of an object an elevator moving down with an acceleration of 9.8 m/s ² will becomes	A. Half B. Double C. Unchanged D. Zero
454	A paratooper moves downward with	A. Zero acceleration B. Constant acceleration C. Positive acceleration D. Negative acceleration
455	A force of 20 N acts along x axis, tis component is.	A. 0 N B. 10 N C. 20 N D. 30 N
456	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
457	A vector is denoted by	A. Light face B. Bold face C. Both a and b D. None of these
458	Which is not the essential component of a spectrometer.	A. Collimator B. Telescope C. Turntable D. Microscope
459	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
460	The kilogramis the basic unit of	A. Time B. Weight C. Length D. Mass
461	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
462	The lower reading of blood pressure is called.	A. Systolic pressure B. Diastolic pressure C. Normal pressure D. Non normal pressure
463	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
464	Angular acceleration is produced by	A. Power B. Torque C. Pressure D. Force
465	The time rate of change of angular displacements called.	A. Linear velocity B. Linear speed C. Angular velocity D. Angular speed
466	The wavelength of wave produced by microwave oven is.	A. 12 cm B. 12 m C. 18 m D. 18 cm
467	the velocity of sound is maximum at 20 °C in	A. Lead B. Copper C. Glass D. Iron
468	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
469	The time rate of change of momentum equals	A. Weight B. Applied force C. Impulse D. Mass
470	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
471	The final image formed by a simple microscope.	A. Virtual and inverted B. Real and erect C. Virtual and erect D. Real and inverted
472	Height of projectile is maximum at an angle of.	A. 45° B. 60° C. 30° D. 90°
473	Dark fringes are also called as	A. Minima B. Maxima C. Wave front D. Ray of light
474	If the temperature of a gas is constant then $\langle \frac{1}{2} m v^2 \rangle$ of the molecules of gas will be.	A. Constant B. Zero C. Increase D. Decrease
475	The optical fiber is covered for protection by a	A. Glass Jacket B. Plastic Jacket C. Copper Jacket D. Aluminum Jacket
476	A man of mass 5 kg is falling freely, the force acting on it will be	A. 5 N B. 9.8 N C. 19.6 N D. 49 N
477	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
478	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
		A. Depend upon the path

479	The work done in gravitational field	A. Depends upon the path B. Does not depend upon the path C. (+)ve D. Zero
480	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
481	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
482	The value of 'g' at the centre of the earth is	A. Infinite B. 2 g C. 3 g D. zero
483	Which of the following is evidence of wave nature of light	A. Interference B. Diffraction C. Polarization D. All of these
484	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
485	The Idea that light is electromagnetic waves was introduced by	A. Maxwell Planck B. Newton C. Fermi D. Crooks
486	Light waves are	A. Longtail waves B. Transvers waves C. Stationary waves D. Mechanical wave
487	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
488	Name the quantity which is a vector.	A. Speed B. Force C. Temperature D. Density
489	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
490	System International was established in	A. 1967 B. 1960 C. 1971 D. 1940
491	In which medium the speed of sound is greater.	A. Oxygen B. Air C. Water D. copper
492	The property of bending of light around obstacles is	A. Interference B. Diffraction C. Polarization D. Superposition
493	In blue light is used as compare to red light then fringe spacing.	A. Increase B. Decreases C. Remain same D. Becomes zero
494	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
495	When distance is plotted against the force, it is taken along	A. x-axis B. y-axis C. z-axis D. None of these
496	The path followed by a projectile is known as its	A. Range B. Trajectory C. Cycle D. Height

497	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%
498	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
499	The Branch of physics wave mechanics introduced by	A. Einstein B. De Broglie C. Max Planck D. Bohr
500	One complete round trip of a body is called	A. Displacement B. Time period C. Vibration D. Frequency
501	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
502	Young in 1801 performed experiment for the first time about	A. Interference B. Diffraction C. Polarization D. Particle nature of light
503	The efficiency of heat engine whose sink is at 17 °C and source at 200 °C is.	A. 38% B. 63% C. 80% D. 90%
504	One mile is equal to	A. 1.625 km B. 1.609 km C. 1.325 km D. 1.850 km
505	The Newton's formula for the speed of sound in air is	
506	Dimensional analysis helps in	A. To convert one unit into another B. Finding relation between quantities C. To confirm the correct answer D. All of the above
507	----- is area of physics	A. Chemical physics B. Astrophysics C. Mechanics D. None of these
508	The mass of an object is quantitative measure of its	A. Momentum B. Acceleration C. Inertia D. Energy
509	The dimensions of work are	A. MLT^{-1} B. MLT^{-2} C. ML^2T^{-2} D. $ML^{-1}T^{-1}$
510	Substances that don't flow easily have	A. Large coefficient of viscosity B. Small coefficient of viscosity C. Medium coefficient of viscosity D. Zero-coefficient of viscosity
511	Which is an example of irreversible process.	A. Explosion B. Evaporation C. Slow compression D. A chemical explosion
512	Motion of projectile is	A. One dimensional B. Two dimensional C. Three dimensional D. Four dimensional
513	When a ball is thrown straight up, the acceleration at its highest point is.	A. Upward B. Downward C. Zero D. Horizontal
514	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

A. Work

515	The term in Bernoulli's equation has the same unit as	B. Volume C. Pressure D. Force
516	For an ideal gas, the internal energy is directly proportional to.	A. Pressure B. volume C. Mass D. Temperature
517	The types of optical fibres are	A. Three B. Four C. Five D. Six
518	When the body moves with constant acceleration the velocity time graph is	A. Parabola B. Hyperbola C. Straight line D. Curve
519	The behaviour of gases is discussed by	A. Knowing their nature B. Knowing their temperature C. Kinetic theory D. Maxwell's theory
520	Unit of impulse is equivalent to that of.	A. Force B. Momentum C. Acceleration D. Velocity
521	In Michelson's experiment the relation used to find the speed of light is	A. 16 fc B. $1/16\text{ fd}$ C. 16 fd D. $16/\text{fd}$
522	Identify the non conservative force among the following.	A. Frictional force B. Electrical force C. Gravitational force D. Elastic restoring force
523	Pascal is famous for his work	A. Hydrodynamics B. Hydrostatics C. Laws of gases D. Behaviour of elastic bodies
524	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
525	$A_1b_1 = A_2b_2$ represents	A. Stock's law B. Newton's law C. Equation of continuity D. Bernoulli's equation
526	In stationary waves the points which always remain at rest are.	A. Nodes B. Antinodes C. Crest D. Trough
527	The difference between two molar capacities is equal to.	A. Plank's constant B. General gas constant C. Molar gas constant D. Boltzmann constant
528	Entropy is a measure of.	A. Internal energy of system B. Order of system C. Disorder of system D. Potential energy of system
529	Beats can be heard when difference of frequency is not more than.	A. 8 Hz B. 10 Hz C. 4 Hz D. 6 Hz
530	When average velocity becomes equal to instantaneous then body is called moving with.	A. Instantaneous acceleration B. Constant acceleration C. Constant velocity D. Variable velocity
531	the change in internal energy is defined as	A. $Q - W$ B. $Q - T$ C. $Q + P$ D. $Q - P$
532	The branch of Physics which deals with velocities approaching the velocity of light is called	A. Quantum Physics B. Relativistic Mechanics C. Wave Mechanics D. None of these

533	the louder the sound, the greater will be its.	A. Speed B. Frequency C. Amplitude D. Wave length
534	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.
535	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
536	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
537	Work is negative when angle between F and d is	A. 45° B. 0° C. 90° D. 180°
538	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
539	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
540	The study of fluid dynamics is	A. Easy B. Complicated C. Impossible D. None of these
541	The formula for the power is	A. $P = W/d$ B. $P = W/v$ C. $P = W/t$ D. $P = Wt$
542	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}
543	The numebr of significant figures in 0.809999 is	A. 2 B. 3 C. 5 D. 6
544	Sound waves can not be	A. Reflected B. Refracted C. Polarized D. Diffracted
545	Light entering rom air glass does not change in its.	A. Frequency B. Wavelength C. Velocity D. Direction
546	Which remains constant in an adiabatic process.	A. Volume B. Pressure C. entropy D. temperature
547	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
548	Systematic erro occurs due to	A. Instrument B. Zero erro of the instrument C. Botah a and b D. None of these
549	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}
550	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
551	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
552	The regular or steady flow of fluid is called	A. Stream line B. Turbulent flow C. Average flow D. None of these
553	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
554	The error in speed of sound calculated by Newton at STP is about.	A. 0 % B. 14 % C. 15 % D. 16 %
555	According to Newton, sound travels in air under conditions of.	A. Adiabatic B. Isothermal C. Isobaric D. Isochoric
556	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
557	The trajectory of a projectile is.	A. Circle B. Parabola C. Hyperbola D. Straight line
558	Which one is a conservative force	A. Elastic spring force B. Air resistance C. Frictional force D. Tension in the spring
559	When sound waves enter in different medium, the quantity that remains unchanged is.	A. Intensity B. Speed C. Frequency D. Wave length
560	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
561	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
562	If velocity 'v' of an object is double, then K.E. because.	A. Remain same B. Sixteen times C. Double D. Four times
563	the locus of all pint in the same wave of vibration is called.	A. Wave front B. Diffraction C. Interference D. Polarization
564	Light year is the unit of	A. Distance B. Time C. Light D. Velocity
565	The difference between tow molar capacities is equal to.	A. Plank's constant B. General gas equation C. Molar gas constant D. Boltzmann constant
566	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
567	When hot and cold water are mixed, the entropy.	A. Decreases B. Increases C. Remain constant D. Zero
		A. 3.6×10^3 K

568	1 KWh =	<p>B. $3.6 \times 10^{6\text{K}}$</p> <p>C. $3.6 \times 10^{9\text{J}}$</p> <p>D. $3.6 \times 10^{12\text{J}}$</p>
569	The law of conservation of mass gives.	<p>A. Beronoulli's</p> <p>B. Venturi relation</p> <p>C. Torricelli's theorem</p> <p>D. Equation of continuity</p>
570	In branch of physics which deals with the nuclear particles such as neutrons, protons and nuclear structure is called	<p>A. Nuclear Physics</p> <p>B. Solid state Physics</p> <p>C. Particle Physics</p> <p>D. Plasma physics</p>
571	Angular frequency is the characteristic of	<p>A. Linear motion</p> <p>B. Vibratory motion</p> <p>C. Circular motion</p> <p>D. All of these</p>
572	The amount of inertia of 10 kg hoop about the axis of rotation perpendicular to its plane having radius 5 m is	<p>A. 50 kgm²</p> <p>B. 100 K gm²</p> <p>C. 150 K gm²</p> <p>D. 250 K gm²</p>
573	Which phenomenon of light proves that light waves are transverse in nature.	<p>A. Refraction</p> <p>B. Reflection</p> <p>C. Diffraction</p> <p>D. Polarization</p>
574	The SI units of flow rate are.	<p>A. m²s⁻¹</p> <p>B. m³s⁻²</p> <p>C. m³s⁻¹</p> <p>D. m²s⁻²</p>
575	The efficiency of a Carnot Heat Engine is 100% if temperature of sink T ₂ is.	<p>A. 0 °C</p> <p>B. 0 K</p> <p>C. 0 °F</p> <p>D. 100 K</p>
576	Direction of a vector in space requires	<p>A. Two axis</p> <p>B. Three axis</p> <p>C. Four axis</p> <p>D. Both a and b</p>
577	The unit of pressure of gas is	<p>A. Nm⁻²</p> <p>B. Pascal</p> <p>C. Atmosphere</p> <p>D. All of these</p>
578	The Bragg's equation is given by	
579	the angular version of F = ma is	<p>A. L = 1w</p> <p>B. $\tau = I\alpha$</p> <p>C. $L = \tau a$</p> <p>D. $f = mv/t$</p>
580	The mean kinetic energy of gas is at.	<p>A. 0 °C</p> <p>B. -273 °C</p> <p>C. 100 K</p> <p>D. 100 °C</p>
581	The internal energy of a piece of lead when beaten by hammer will.	<p>A. Increase</p> <p>B. Decrease</p> <p>C. Remains constant</p> <p>D. Increases and then decrease</p>
582	In case of planets centripetal force is provided by	<p>A. Coulomb's force</p> <p>B. Electrostatic force</p> <p>C. Gravitational force</p> <p>D. Magnetic force</p>
583	The wave form of SHM is.	<p>A. Sine wave</p> <p>B. Cosine wave</p> <p>C. Tangent wave</p> <p>D. Square wave</p>
584	The device used for measurement of liquid flow is.	<p>A. Manometer</p> <p>B. Barometer</p> <p>C. Hydrometer</p> <p>D. Venturimeter</p>
585	Unit of thermodynamics scale of temperature is.	<p>A. Centigrade</p> <p>B. Fahrenheit</p> <p>C. Kelvin</p> <p>D. Celsius</p>
586	If the object is at 5 cm from the lens of simple microscope then its magnifying power will be.	<p>A. 5</p> <p>B. 10</p> <p>C. 15</p> <p>D. --</p>

587	_____ is bio fuel	A. Water B. Petrol C. Ethanol D. Oil
588	Which quantity of the following is dimensionless.	A. Angular velocity B. Centripetal force C. Angular acceleration D. Angular displacement
589	The space within which gravitational force acts on a body is called	A. Electric field B. Gravitational field C. Magnetic field D. Force field
590	For working of heat engine, there must be	A. A source B. A sink C. Either of these D. Both of them
591	The value of a time period of allow flying satellite is	A. 1 year B. 84 minutes C. 28 hours D. 1 day
592	Vectors have	A. Numerical value B. Directional C. Both a and b D. None of these
593	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
594	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
595	In case the work done in zero.	A. Constant pressure B. Constant volume C. Constant temperature D. Constant mass
596	If velocity time graph is parallel to time axis, then acceleration of moving body will be.	A. Maximum B. Positive C. Zero D. Negative
597	3 Joules of work id done is 3 seconds, then power	A. 6 Watt B. 1 Watt C. 3 Watt D. 2 Watt
598	Centripetal force perform	A. Maximum work B. Minimum work C. Negative work D. No work
599	Damping is the process in which energy	A. Increases B. Remains constant C. Dissipates D. None of these
600	Heat is form of.	A. Power B. Momentum C. Energy D. Torque
601	Star moving towards the earth show	A. Red shift B. Blue shift C. Green shift D. Yellow shift
602	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
603	The mass of a body is quantitative measure of its	A. Motion B. Inertia C. Weight D. All of these
604	Force 12 N and 5 N are add. the resultant con not be	A. 13 N B. 6 N C. - - -

		C. 7 N D. 17 N
605	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
606	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
607	The diastolic pressure of a normal healthy person is.	A. 120 torr B. 110 torr C. 100 torr D. 75-80 torr
608	The motion of a simple pendulum is the example of	A. Vibratory motion B. Rotatory motion C. Periodic motion D. Both a and c
609	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
610	At which place the motion of a simple pendulum will be slowest.	A. Karachi B. K-2 C. Murree D. Lahore
611	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
612	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
613	The work done by centripetal force is	A. (-)ve B. (+)ve C. Maximum D. Zero
614	the systolic pressure of normal healthy person is.	A. 120 torr B. 130 torr C. 115 torr D. 110 torr
615	The action and reaction never act on	A. Same body B. Two bodies C. many bodies D. All of these
616	The diver spin faster when moment of inertia becomes.	A. smaller B. Greater C. Constant D. Equal
617	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
618	In young's double slit experiment for the interference the central region will be	A. Dark B. Bright C. Coloured D. None of these
619	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
620	Parallel vectors of same magnitude will be	A. Equal B. Opposite C. Both a and b D. None of these
621	In the thermodynamics process , the equation $W = -\Delta U$ represents.	A. Isothermal expansion B. Isothermal compression C. Adiabatic expansion D. Adiabatic compression

622	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
623	The circumference of the earth was determined by	A. Bohr B. A Beruni C. Ibn al Haithm D. Chadwick
624	Angular momentum has the same unit as	A. Impulse x distance B. Power x time C. Linear x time D. work x frequency
625	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
626	The distance between two consecutive trough is called.	A. Displacement B. Amplitude C. Wave length D. Wave front
627	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
628	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
629	The speed of light was measured correctly by	A. Galileo B. Michelson C. Newton D. Maxwell
630	In matter, the Atoms are in a state of never ending	A. Motion B. Rest C. Change D. State of decline
631	The mechanism of transports energy of all the waves is	A. Different B. Same C. Complicated D. Easy
632	The density of blood is nearly equal to.	A. Air B. Milk C. Honey D. Water
633	Which one of the following scientists made some contributions to geometrical optics	A. Plato B. Archimedes C. Euclid D. None of these
634	When a force 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
635	The units of magnifying power of microscope or telescope are.	A. Metre B. m ⁻¹ C. dioptre D. No unit
636	Two tuning 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
637	In rotational motion the torque is equal to rate of change of	A. Angular velocity B. Linear momentum C. Angular momentum D. Angular acceleration
638	Computer Chips are made of	A. carbon B. Germanium C. Silicon D. Sodium
639	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

640	For working of heat engine, there must be.	A. A source B. A sink C. either of these D. Both of these
641	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
642	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
643	the acceleration of a body having SHM, depends upon its.	A. Time period B. Amplitude C. Frequency D. Displacement from mean position
644	The magnification of a convex lens of focal length 5 cm is equal to.	A. 5 B. 6 C. 10 D. 23
645	The final image seen through ey piece in telescope is.	A. Real, enlarge and inverted B. Virtual, enlarge and erect C. Virtual, enlarge and inverted D. In Real, enlarge and erect
646	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
647	Viscosity is represented by Greek letter	
648	The temperature of human body on Kelvin scale is	A. 210K B. 310K C. 410K D. 510K
649	SI units of time was redefined in	A. 1900 B. 1967 C. 1960 D. 1983
650	Time rate of change of angular displacement is called	A. Linear velocity B. Angular velocity C. Rotational velocity D. Vibrational velocity
651	The SI unit of angular momentum is	A. J.S-2 B. J.S-1 C. J.S D. J.m
652	Carnot cycle consists of.	A. Two steps B. Three steps C. Four steps D. Five steps
653	Work has dimension lime	A. Torque B. Momentum C. Velocity D. Power
654	Velocity of sound is independent of	A. Temperature B. Density C. Pressure D. Medium
655	Two quantities involved in work are	A. Force and speed B. Force and velocity C. Force and displacement D. Force and acceleration
656	Watt -m2 is the unit of	A. Energy B. Intensity C. Power D. Work
657	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
		A. Speed of the fluid increases

658	If the stream lines of fluid are forced closer together then.	<p>A. Speed of the fluid increases</p> <p>B. Speed of the fluid decreases</p> <p>C. Pressure of the fluid increases</p> <p>D. Speed of the fluid remain same</p>
659	Wavelength of a wave for closed pipe having length 'l' in the fundamental mode is.	<p>A. 2 l</p> <p>B. 1/2</p> <p>C. 4 l</p> <p>D. l</p>
660	73.650 rounded off upto one decimal is	<p>A. 73.6</p> <p>B. 74.00</p> <p>C. 73.7</p> <p>D. 73.65</p>
661	The error is constant forerror	<p>A. Random</p> <p>B. Systematic</p> <p>C. Both a and b</p> <p>D. All</p>
662	The rate of change of angular velocity is called	<p>A. Angular velocity</p> <p>B. Angular acceleration</p> <p>C. Angular displacement</p> <p>D. Angular speed</p>
663	A convex lens can be used as	<p>A. Simple microscope</p> <p>B. Compound microscope</p> <p>C. Telescope</p> <p>D. Spectrometer</p>
664	The word Fluid means	<p>A. To rise</p> <p>B. To fall</p> <p>C. To flow</p> <p>D. To oppose</p>
665	Distance covered by a freely falling body is 2 seconds will be	<p>A. 9.8 m</p> <p>B. 19.6 m</p> <p>C. 44.4 m</p> <p>D. 49 m</p>
666	How many orbiting satellites from the Global positing system.	<p>A. 3</p> <p>B. 12</p> <p>C. 24</p> <p>D. 22</p>
667	In thermodynamics system internal energy decrease by 100 J and 100 J of work done on the system then heat lost will be.	<p>A. Zero</p> <p>B. 100 J</p> <p>C. 200 J</p> <p>D. -200 J</p>
668	In stationary waves, the velocity of particle at the node is.	<p>A. Maximum</p> <p>B. Infinite</p> <p>C. Zero</p> <p>D. Variable</p>
669	If heat is added to a system, then its entropy will.	<p>A. Increases and positive</p> <p>B. Decrease and positive</p> <p>C. Increases but negative</p> <p>D. Decreases but negative</p>
670	The distance between the consecutive nodes is	
671	The device used to study the spectra from different sources of light is	<p>A. Telescope</p> <p>B. Optical fibre</p> <p>C. Spectrometer</p> <p>D. Microscope</p>
672	A Carnot engine has an efficiency of 50% when its sink temperature is at 27 °C. The temperature of source.	<p>A. 273^oC</p> <p>B. 300^oC</p> <p>C. 327^oC</p> <p>D. 373^oC</p>
673	The distance between two consecutive crest is called.	<p>A. Displacement</p> <p>B. Amplitude</p> <p>C. Wave front</p> <p>D. Wavelength</p>
674	Blood pressure is measured by	<p>A. Hydrometer</p> <p>B. Barometer</p> <p>C. Sphygmomanometer</p> <p>D. Galvanometer</p>
675	The components of a vector which are perpendicular to each other are called	<p>A. Horizontal components</p> <p>B. Vertical components</p> <p>C. Rectangular components</p> <p>D. All of these</p>
		<p>A. m-sec⁻²</p> <p>B. m³-sec⁻¹</p>

676	The SI unit of flow rate are	A. $\text{m}^3\text{sec}^{-2}$ C. $\text{m}^3\text{sec}^{-2}$ D. $\text{m}^3\text{sec}^{-3}$
677	The collision between the gas molecules is	A. Elastic B. Inelastic C. Both a and b D. None of these
678	Significant figures in 0.000546	A. 1 B. 4 C. 3 D. 5
679	Waves transport energy without transporting	A. Matter B. Force C. Momentum D. All of these
680	The largest satellite system is managed by	A. 116 countries B. 126 countries C. 136 countries D. 140 countries
681	The horizontal component of velocity of projectile	A. Increases B. Decreases C. Remain same D. Decreases and then increases
682	Efficiency of a heat engine working between 27°C and 32°C will be.	A. 50% B. 90% C. 40% D. 62%
683	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
684	The basics quantity among the following is	A. Mass B. Torque C. Force D. Velocity
685	The efficiency of diesel engine is about	A. 25% to 30% B. 35% to 40% C. 40% to 50% D. 50% to 60%
686	Opted unit to measure blood pressure is.	A. N/m^2 B. Pascal C. mm of Hg D. N.m^2
687	The centre of Newton's fringe is dark due to.	A. Destructive interference B. Diffraction C. Constructive interference D. Polarization
688	The founder of mathematical physics is	A. EuclidArchimedes B. Plato C. Aristotle
689	Stars moving away from Earth show a	A. Green shift B. Blue shift C. Red shift D. Yellow shift
690	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
691	The distinguish between transverse and longitudinal wave_____ is used.	A. Refraction B. Interference C. Diffraction D. polarization
692	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}
693	The magnifying power is also called	A. Resolving power B. Angular magnification C. Strength of eye D. None of these

694	Multimode step index fibre is useful for	A. Long distances B. Short distances C. Better quality D. Low price
695	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
696	Average acceleration is a	A. Scalar quantity B. Vector quantity C. (-) ve quantity D. None of these
697	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
698	Sound travel faster in	A. CO ₂ B. H ₂ C. O ₂ D. He
699	Slope of velocity time graph describes a physical quantity called.	A. Displacement B. Average velocity C. Average acceleration D. Momentum
700	One radian is equal to.	A. 75.3° B. 57.3° C. 35.7° D. 73.3°