

BOARD OF INTERMEDIATE AND SECONDARY EDUCATION, MULTAN.
OBJECTIVE KEY FOR INTERMEDIATE 1st ANNUAL EXAMINATION, 2025

Name of Subject: PHYSICS Part - I Group: I

Q. Nos	Paper Code	Correct Answer	Paper Code	Correct Answer	Paper Code	Correct Answer	Paper Code	Correct Answer
	2471		2473		2475		2477	
1	B&C	56.8, 56.9	D	Red light	A	Einstein	A	Short range
2	B	Steradian	B	Virtual and erect	B	Decreases	D	Impulse
3	A	Zero	C	Remain same	D	Sine wave	B	120J
4	D	SN	B	200K	C	Doppler effect	C	Elliptical
5	A	Short range	B&C	56.8, 56.9	A	2/n	A	Einstein
6	D	Impulse	B	Steradian	D	Red light	B	Decreases
7	B	120J	A	Zero	B	Virtual and erect	D	Sine wave
8	C	Elliptical	D	SN	C	Remain same	C	Doppler effect
9	A	Einstein	A	Short range	B	200K	A	2/n
10	B	Decreases	D	Impulse	B&C	56.8 & 56.9	D	Red light
11	D	Sine wave	B	120J	B	Steradian	B	Virtual & erect
12	C	Doppler effect	C	Elliptical	A	Zero	C	Remain same
13	A	2/n	A	Einstein	D	SN	B	200K
14	D	Red light	B	Decreases	A	Short range	B&C	56.9 & 56.8
15	B	Virtual erect	D	Sine wave	D	Impulse	B	Steradian
16	C	Remain same	C	Doppler effect	B	120J	A	Zero
17	B	200K	A	2/n	C	Elliptical	D	SN
18								
19								
20								
Cross Check	A B C D		A B C D		A B C D		A B C D	
Total	4644		4644		4644		4644	

Key: فزکس (Subjective & Objective) کو بطور تیس چیک کر لیا ہے یہ پورے Syllabus کے میں مطابق Set کیا گیا ہے۔ اس سوالیہ

پورے میں تیس چیک کر لیا ہے یہ پورے Syllabus کے میں مطابق Set کیا گیا ہے۔ اس سوالیہ پورے میں تیس چیک کر لیا ہے یہ پورے Syllabus کے میں مطابق Set کیا گیا ہے۔ اس سوالیہ پورے میں تیس چیک کر لیا ہے یہ پورے Syllabus کے میں مطابق Set کیا گیا ہے۔ اس سوالیہ پورے میں تیس چیک کر لیا ہے یہ پورے Syllabus کے میں مطابق Set کیا گیا ہے۔ اس سوالیہ

Prepared & Checked By:

Date: 22-5-25

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Re-Checked By: Shahid Zahid (Subjective & Objective) کو بطور تیس چیک کر لیا ہے یہ پورے Syllabus کے میں مطابق Set کیا گیا ہے۔ اس سوالیہ

1	Shahid Zahid	Associate Prof.	Govt. Graduate College Multan	03077360020	
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BOARD OF INTERMEDIATE AND SECONDARY EDUCATION, MULTAN.
OBJECTIVE KEY FOR INTERMEDIATE 1st ANNUAL EXAMINATION, 2025

Name of Subject: PHYSICS - PART - I Group II

Q. Nos	Paper Code	Correct Answer	Paper Code	Correct Answer	Paper Code	Correct Answer	Paper Code	Correct Answer
	2472		2474		2476		2478	
1	C	273.16 K	A	Flow rate	A	$\frac{1}{2} \tan \theta$	B	45°
2	B	1.40	D	$\sqrt{2}$	D	goes on increasing	C	4π steradian
3	A	1.3 μm	C	Frictional force	A	70 N	A	Subtraction
4	D	$2 \times 10^{-6} \text{ m}$	B	120°	B	45°	C	273.16 K
5	B	Harmonics	A	$\frac{1}{2} \tan \theta$	C	4π steradian	B	1.40
6	C	Sound waves	D	goes on increasing	A	Subtraction	A	1.3 μm
7	B	$\frac{1}{\sqrt{2}} x_0$	A	70 N	C	273.16 K	D	$2 \times 10^{-6} \text{ m}$
8	A	Flow rate	B	45°	B	1.40	B	Harmonics
9	D	$\sqrt{2}$	C	4π steradian	A	1.3 μm	C	Sound waves
10	C	Frictional force	A	Subtraction	D	$2 \times 10^{-6} \text{ m}$	B	$\frac{1}{\sqrt{2}} x_0$
11	B	120°	C	273.16 K	B	Harmonics	A	Flow rate
12	A	$\frac{1}{2} \tan \theta$	B	1.40	C	Sound waves	D	$\sqrt{2}$
13	D	goes on increasing	A	1.3 μm	B	$\frac{1}{\sqrt{2}} x_0$	C	Frictional force
14	A	70 N	D	$2 \times 10^{-6} \text{ m}$	A	Flow rate	B	120°
15	B	45°	B	Harmonics	D	$\sqrt{2}$	A	$\frac{1}{2} \tan \theta$
16	C	4π steradian	C	Sound waves	C	Frictional force	D	goes on increasing
17	A	Subtraction	B	$\frac{1}{\sqrt{2}} x_0$	B	120°	A	70 N
18								
19								
20								
Cross Check	A B C D		A B C D		A B C D		A B C D	
Total	5543		5543		5543		5543	

سرٹیفکیٹ یافتہ تھیں سوالیہ پرچہ امارت گنگ

ہم نے سوالیہ پرچہ فاروق اور انگریزی Version بھی چیک کر لیا ہے یہ پرچہ Syllabus کے بین مطابق Set کیا گیا ہے۔ اس سوالیہ پرچہ میں کسی قسم کی غلطی نہ ہے۔ ہم نے سوالیہ پرچہ فاروق اور انگریزی Version بھی چیک کر لیا ہے۔ یہ Version آپس میں مطابقت رکھتے ہیں۔ نیز اس پرچہ کی مدد سے Key (MCQs) کی بات تصدیق کی جاتی ہے کہ اس میں بھی کسی قسم کی کوئی غلطی نہ ہے۔ مزید یہ کہ ہم نے Key بنانے سے متعلق دفتر کی جانب سے تیار کردہ ہدایات کو مدنظر رکھ کر اس پرچہ کو تیار کیا ہے اور ان کی روشنی میں Key بنائی ہے۔ نیز سب ایگزامینرز کیلئے تفصیلی مارکنگ ہدایات / مارکنگ شیٹ / Rubrics بھی تیار کر دی گئی ہیں۔

Prepared & Checked By:

Dated: 22-05-25

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Re-Checked By: ہم نے درج بالا سوالیہ پرچہ (انشائیہ + معروضی) کی مدد سے "Key" اور ہدایات کے حوالے سے مکمل طور پر کی ہے۔ کسی قسم کی کوئی غلطی نہ ہے۔

1	Bashir Ahmad	Associate Prof.	Govt. Millat College Multan	0300 630587	
2	Shahid Asghar	Associate Prof.	Govt. Cummins College Multan	03077360030	

INTERMEDIATE PART-I (11 th Class)		2025 (1 st -A)	Roll No: _____
PHYSICS PAPER-I GROUP-I			
TIME ALLOWED: 2.40 Hours		SUBJECTIVE	MAXIMUM MARKS: 68
NOTE: Write same question number and its parts number on answer book, as given in the question paper.			
SECTION-I			
2. Attempt any eight parts.			8 × 2 = 16
(i)	Write the dimension of Pressure and Density.		
(ii)	Define Random and Systematic error.		
(iii)	The period of simple pendulum is measured by stopwatch, which type of errors are possible in the time period?		
(iv)	Define and explain significant figures.		
(v)	Is it possible to add a vector quantity to a scalar quantity? Explain.		
(vi)	Name the three different conditions that could make $\vec{A}_1 \times \vec{A}_2 = 0$		
(vii)	What do you understand by positive and negative torque?		
(viii)	Can velocity of an object reverse the direction, when acceleration is constant, if so, give an example?		
(ix)	Define Impulse and show that how it is related to linear momentum.		
(x)	Why is the first law of motion also called law of inertia?		
(xi)	An object has "1" (One) Joule of P.E. What does it mean? Explain.		
(xii)	In which case more work is done when a 50kg bag is lifted up by 50cm and when a 50kg crate is pushed through 2m by 50N force?		
3. Attempt any eight parts.			8 × 2 = 16
(i)	What is moment of inertia of a 50kg sphere whose radius is 25cm?		
(ii)	Show that orbital angular momentum $L_o = mvr$		
(iii)	Find the relation between linear velocity and angular velocity.		
(iv)	Explain the difference between laminar flow and turbulent flow.		
(v)	Explain the term viscosity.		
(vi)	What is second pendulum? Write its length and frequency.		
(vii)	Explain the relation between total energy, potential energy and kinetic energy of a body oscillating with SHM.		
(viii)	Show that in SHM the acceleration is zero when the velocity is greatest.		
(ix)	Why sound travel faster in solids then in gases?		
(x)	What features do longitudinal waves have common with transverse waves?		
(xi)	What is effect of variation of volume on the speed of sound in gas?		
(xii)	A circular moving body have zero moment of inertia. Why?		
4. Attempt any six parts.			6 × 2 = 12
(i)	State Huygen's Principle.		
(ii)	What is Interference of light? What are the conditions to observe the interference phenomenon?		
(iii)	An oil film spreading over a wet footpath show colours. Explain how does it happen?		
(iv)	Why would it be advantageous to use blue light with compound microscope?		
(v)	Why single mode fiber preferred in telecommunication?		
(vi)	What is spectrometer? Write down its main parts.		
(vii)	Differentiate between isothermal process and adiabatic process.		
(viii)	Explain why the average velocity of a gas molecules is zero but the average of square of velocities is not zero?		
(ix)	What happen to the temperature of room when an airconditioner is left running on a table in the middle of room?		
SECTION-II			
NOTE: Attempt any three questions.			3 × 8 = 24
5.(a)	Define vector product. Give two examples. Also write down characteristics of vector product.		5
(b)	A ball is thrown with a speed of $30ms^{-1}$ in a direction 30° above the horizon. Determine the height to which it rises and the time of flight.		3
6.(a)	Define gravitational field and show that work done in gravitational field is independent of the path followed by the body.		5
(b)	What should be the orbiting speed to launch a satellite in a circular orbit 900 km above the surface of earth? (Take mass of earth as $6.0 \times 10^{24} kg$ and its radius 6400 km)		3
7.(a)	State and derive the Bernoulli's equation.		5
(b)	A heat engine performs 100J of work and at the same time rejects 400J of heat energy to the cold reservoirs. What is the efficiency of the engine?		3
8.(a)	State Bernoulli's theorem. Derive relation for Bernoulli's equation.		5
(b)	A thermodynamic system undergoes a process in which its internal energy decreases by 300J . If at the same time 120J of work is done on the system, find heat lost by the system.		3
9.(a)	Explain construction and working of a compound microscope using ray diagram. Derive expression for angular magnification M of a compound microscope.		5
(b)	A light is normally incident on a grating which has 2500 lines/cm. Compute the wavelength of a spectral line for which the deviation in second order is 15.0° .		3

INTERMEDIATE PART-I (11 th Class)		2025 (1 st -A)	Roll No:
PHYSICS PAPER-I GROUP-II			
TIME ALLOWED: 2.40 Hours		SUBJECTIVE	MAXIMUM MARKS: 68
NOTE: Write same question number and its parts number on answer book, as given in the question paper.			
SECTION-I			
2. Attempt any eight parts.			8 × 2 = 16
(i)	How can you assess final result with total uncertainty in multiplication? Give an example.		
(ii)	What are dimensions? Give one example.		
(iii)	The period of simple pendulum is measured by a stopwatch, what type of errors are possible in the time period?		
(iv)	What are the dimensions and units of gravitational constant G in the formula $F = G \frac{m_1 m_2}{r^2}$		
(v)	Compare the values of the scalar product for the angles $\theta = 30^\circ$ and $\theta = 60^\circ$, which one is greater?		
(vi)	If all the components of the vectors, $\vec{A}_1$ and $\vec{A}_2$ were reversed, how would this alter $\vec{A}_1 \times \vec{A}_2$.		
(vii)	Can a body rotate about its centre of gravity under the action of its weight?		
(viii)	Derive an equation for the every height of projectile motion.		
(ix)	Explain the circumstances in which the velocity 'v' and acceleration 'a' of a car. (i) 'v' is zero but 'a' is not zero (ii) perpendicular to one another		
(x)	Motion with constant velocity is a special case of motion with constant acceleration and with variable acceleration. Explain.		
(xi)	How would you prove that "potential energy increase with height and vice versa" from the formula $U = \frac{-GMm}{r}$?		
(xii)	When a rocket re-enters the atmosphere, its nose cone becomes very hot. Where does this heat energy comes from?		
3. Attempt any eight parts.			8 × 2 = 16
(i)	Show that orbital angular momentum, $L_o = mvr$		
(ii)	Why does a diver changes his body positions before and after diving in the pool?		
(iii)	Differentiate between real and apparent weight.		
(iv)	Explain how the law of conservation of angular momentum is important in diving sports?		
(v)	Explain the difference between laminar flow and turbulent flow.		
(vi)	Why fog droplets appear to be suspended in air?		
(vii)	Show that in simple harmonic motion the acceleration is zero when the velocity is greatest and the velocity is zero when the acceleration is greatest.		
(viii)	What is the total distance travelled by an object moving with SHM in a time equal to its period, if its amplitude is A ?		
(ix)	When the length of a simple pendulum is doubled, find the ratio of new frequency to old frequency.		
(x)	Explain the terms; crest, trough, node and antinode.		
(xi)	How should a sound source move with respect to an observer so that the frequency of its sound does not change?		
(xii)	Write down the three cases of superposition principle.		
4. Attempt any six parts.			6 × 2 = 12
(i)	Define diffraction of light. What is diffraction grating?		
(ii)	Why the Polaroid sunglasses are better than ordinary sunglasses?		
(iii)	An oil film spreading over a wet footpath shows colours. Explain how does it happen?		
(iv)	Define angular magnification and resolving power of an instrument.		
(v)	Describe with the help of diagram, how a single biconvex lens can be used as a magnifying glass?		
(vi)	How the light signal is transmitted through the optic fibre?		
(vii)	Define internal energy. How is internal energy of an ideal gas related to temperature?		
(viii)	Specific heat of a gas at constant pressure is greater than specific heat at constant volume. Why?		
(ix)	Is it possible to construct a heat engine that will not expel heat into the atmosphere? Explain.		
SECTION-II			
NOTE: Attempt any three questions.			3 × 8 = 24
5.(a)	Define elastic collision. Show that relative speed of approach is equal to relative speed of separation for one dimensional collision.		5
(b)	Find the angle between the two vectors, $\vec{A} = 5\hat{i} + \hat{j}$ and $\vec{B} = 2\hat{i} + 4\hat{j}$		3
6.(a)	Define Escape Velocity and derive the mathematical expression for escape velocity.		5
(b)	A 1000kg car is travelling with a speed of 144km/h rounds a curve of radius 100m, find the necessary centripetal force.		3
7.(a)	Write the postulates of kinetic theory of gases and also describe the kinetic interpretation of temperature.		5
(b)	What gauge pressure is required in the city mains for a stream from a fire hose connected to the mains to reach a vertical height of 15.0m?		3
8.(a)	Explain Newton formula for speed of sound. How did Laplace correct it? Explain.		5
(b)	A block of mass 4kg is dropped from a height of 0.80 m on to a spring of spring constant $k = 1960 \text{ N/m}$. Find the maximum distance through which the spring will be compressed?		3
9.(a)	Define astronomical telescope. Write down its construction, working and magnifying power.		5
(b)	In a double slit experiment the second order maxima occurs at $\theta = 0.25^\circ$. The wavelength is 650nm. Determine the slit separation.		3

Paper Code Number: 2471		2025 (1 st -A) INTERMEDIATE PART-I (11 th Class)		Roll No: _____	
PHYSICS PAPER-I GROUP-I					
TIME ALLOWED: 20 Minutes		OBJECTIVE		MAXIMUM MARKS: 17	
Q.No.1	You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that bubble in front of that question number, on bubble sheet. Use marker or pen to fill the bubbles. Cutting or filling two or more bubbles will result in zero mark in that question.				
S.#	QUESTIONS	A	B	C	D
1	56.8546 is rounded off to three significant figures as:	56.0	56.8	56.9	57.0
2	The <i>S.I.</i> unit of solid angle is:	Radian	Steradian	Revolution	Degree
3	If a body is rotating with constant angular velocity, its torque will be:	Zero	May be zero	Constant	Maximum
4	The resultant of two force 3 <i>N</i> and 4 <i>N</i> acting at right angle to each other is:	7 <i>N</i>	6 <i>N</i>	1 <i>N</i>	5 <i>N</i>
5	Ballistic missiles are useful for:	Short range	Intermediate range	Long range	All of these
6	Change in momentum is called:	Force	Pressure	Tension	Impulse
7	The consumption of energy by 60 <i>watt</i> bulb in 2 seconds is:	20 <i>J</i>	120 <i>J</i>	30 <i>J</i>	0.02 <i>J</i>
8	If orbital velocity of a satellite is 30,000 <i>kmh</i> ⁻¹ , its orbit will be:	Parabolic	Circular	Elliptical	Hyperbolic
9	Which theory is better about gravitation?	Einstein	Plank	Newton	Michelson
10	Water is flowing through a pipe under constant pressure. At some place, the pipe becomes narrow. The pressure of water at this place:	Increases	Decreases	Remains same	None of these
11	The wave-form of <i>S.H.M</i> is:	Square wave	Sawtooth wave	Random wave	Sine wave
12	Radar is an application of:	Beats	Interference	Doppler effect	Echo
13	If a string of length " <i>ℓ</i> " vibrates in <i>n</i> loops, the wavelength of stationary waves produced will be:	$\frac{2\ell}{n}$	$\frac{n\ell}{2}$	$\frac{\ell}{2n}$	$\frac{n}{2\ell}$
14	The fringe spacing in double slit experiment increases if we use:	Yellow light	Green light	Blue light	Red light
15	The final image formed by simple microscope is:	Virtual and inverted	Virtual and erect	Real and erect	Real and inverted
16	In an adiabatic process, the entropy of the system:	Increases	Decreases	Remains same	First increase then decreases
17	Temperature difference between source and sink is 200°C . Their temperature difference in Kelvin scale will be:	173 <i>K</i>	200 <i>K</i>	273 <i>K</i>	373 <i>K</i>

Paper Code Number: 2473		2025 (1 st -A) INTERMEDIATE PART-I (11 th Class)		Roll No: _____	
PHYSICS PAPER-I GROUP-I					
TIME ALLOWED: 20 Minutes		OBJECTIVE		MAXIMUM MARKS: 17	
Q.No.1	You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that bubble in front of that question number, on bubble sheet. Use marker or pen to fill the bubbles. Cutting or filling two or more bubbles will result in zero mark in that question.				
S.#	QUESTIONS	A	B	C	D
1	The fringe spacing in double slit experiment increases if we use:	Yellow light	Green light	Blue light	Red light
2	The final image formed by simple microscope is:	Virtual and inverted	Virtual and erect	Real and erect	Real and inverted
3	In an adiabatic process, the entropy of the system:	Increases	Decreases	Remains same	First increase then decreases
4	Temperature difference between source and sink is 200°C . Their temperature difference in Kelvin scale will be:	173K	200K	273K	373K
5	56.8546 is rounded off to three significant figures as:	56.0	56.8	56.9	57.0
6	The S.I. unit of solid angle is:	Radian	Steradian	Revolution	Degree
7	If a body is rotating with constant angular velocity, its torque will be:	Zero	May be zero	Constant	Maximum
8	The resultant of two force 3N and 4N acting at right angle to each other is:	7N	6N	1N	5N
9	Ballistic missiles are useful for:	Short range	Intermediate range	Long range	All of these
10	Change in momentum is called:	Force	Pressure	Tension	Impulse
11	The consumption of energy by 60watt bulb in 2 seconds is:	20J	120J	30J	0.02J
12	If orbital velocity of a satellite is $30,000\text{ kmh}^{-1}$, its orbit will be:	Parabolic	Circular	Elliptical	Hyperbolic
13	Which theory is better about gravitation?	Einstein	Plank	Newton	Michelson
14	Water is flowing through a pipe under constant pressure. At some place, the pipe becomes narrow. The pressure of water at this place:	Increases	Decreases	Remains same	None of these
15	The wave-form of S.H.M is:	Square wave	Sawtooth wave	Random wave	Sine wave
16	Radar is an application of:	Beats	Interference	Doppler effect	Echo
17	If a string of length " ℓ " vibrates in n loops, the wavelength of stationary waves produced will be:	$\frac{2\ell}{n}$	$\frac{n\ell}{2}$	$\frac{\ell}{2n}$	$\frac{n}{2\ell}$

Paper Code Number: 2475		2025 (1 st -A) INTERMEDIATE PART-I (11 th Class)		Roll No: _____	
PHYSICS PAPER-I GROUP-I					
TIME ALLOWED: 20 Minutes		OBJECTIVE		MAXIMUM MARKS: 17	
Q.No.1	You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that bubble in front of that question number, on bubble sheet. Use marker or pen to fill the bubbles. Cutting or filling two or more bubbles will result in zero mark in that question.				
S.#	QUESTIONS	A	B	C	D
1	Which theory is better about gravitation?	Einstein	Plank	Newton	Michelson
2	Water is flowing through a pipe under constant pressure. At some place, the pipe becomes narrow. The pressure of water at this place:	Increases	Decreases	Remains same	None of these
3	The wave-form of <i>S.H.M</i> is:	Square wave	Sawtooth wave	Random wave	Sine wave
4	Radar is an application of:	Beats	Interference	Doppler effect	Echo
5	If a string of length " <i>ℓ</i> " vibrates in <i>n</i> loops, the wavelength of stationary waves produced will be:	$\frac{2\ell}{n}$	$\frac{n\ell}{2}$	$\frac{\ell}{2n}$	$\frac{n}{2\ell}$
6	The fringe spacing in double slit experiment increases if we use:	Yellow light	Green light	Blue light	Red light
7	The final image formed by simple microscope is:	Virtual and inverted	Virtual and erect	Real and erect	Real and inverted
8	In an adiabatic process, the entropy of the system:	Increases	Decreases	Remains same	First increase then decreases
9	Temperature difference between source and sink is $200^{\circ}C$. Their temperature difference in Kelvin scale will be:	173K	200K	273K	373K
10	56.8546 is rounded off to three significant figures as:	56.0	56.8	56.9	57.0
11	The <i>S.I.</i> unit of solid angle is:	Radian	Steradian	Revolution	Degree
12	If a body is rotating with constant angular velocity, its torque will be:	Zero	May be zero	Constant	Maximum
13	The resultant of two force <i>3N</i> and <i>4N</i> acting at right angle to each other is:	<i>7N</i>	<i>6N</i>	<i>1N</i>	<i>5N</i>
14	Ballistic missiles are useful for:	Short range	Intermediate range	Long range	All of these
15	Change in momentum is called:	Force	Pressure	Tension	Impulse
16	The consumption of energy by <i>60watt</i> bulb in 2 seconds is:	<i>20J</i>	<i>120J</i>	<i>30J</i>	<i>0.02J</i>
17	If orbital velocity of a satellite is $30,000\text{ kmh}^{-1}$, its orbit will be:	Parabolic	Circular	Elliptical	Hyperbolic

Paper Code Number: 2477		2025 (1 st -A) INTERMEDIATE PART-I (11 th Class)		Roll No: _____	
PHYSICS PAPER-I GROUP-I					
TIME ALLOWED: 20 Minutes		OBJECTIVE		MAXIMUM MARKS: 17	
Q.No.1	You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that bubble in front of that question number, on bubble sheet. Use marker or pen to fill the bubbles. Cutting or filling two or more bubbles will result in zero mark in that question.				
S.#	QUESTIONS	A	B	C	D
1	Ballistic missiles are useful for:	Short range	Intermediate range	Long range	All of these
2	Change in momentum is called:	Force	Pressure	Tension	Impulse
3	The consumption of energy by 60watt bulb in 2 seconds is:	20J	120J	30J	0.02J
4	If orbital velocity of a satellite is $30,000 \text{ kmh}^{-1}$, its orbit will be:	Parabolic	Circular	Elliptical	Hyperbolic
5	Which theory is better about gravitation?	Einstein	Plank	Newton	Michelson
6	Water is flowing through a pipe under constant pressure. At some place, the pipe becomes narrow. The pressure of water at this place:	Increases	Decreases	Remains same	None of these
7	The wave-form of S.H.M is:	Square wave	Sawtooth wave	Random wave	Sine wave
8	Radar is an application of:	Beats	Interference	Doppler effect	Echo
9	If a string of length " ℓ " vibrates in n loops, the wavelength of stationary waves produced will be:	$\frac{2\ell}{n}$	$\frac{n\ell}{2}$	$\frac{\ell}{2n}$	$\frac{n}{2\ell}$
10	The fringe spacing in double slit experiment increases if we use:	Yellow light	Green light	Blue light	Red light
11	The final image formed by simple microscope is:	Virtual and inverted	Virtual and erect	Real and erect	Real and inverted
12	In an adiabatic process, the entropy of the system:	Increases	Decreases	Remains same	First increase then decreases
13	Temperature difference between source and sink is 200°C . Their temperature difference in Kelvin scale will be:	173K	200K	273K	373K
14	56.8546 is rounded off to three significant figures as:	56.0	56.8	56.9	57.0
15	The S.I. unit of solid angle is:	Radian	Steradian	Revolution	Degree
16	If a body is rotating with constant angular velocity, its torque will be:	Zero	May be zero	Constant	Maximum
17	The resultant of two force 3N and 4N acting at right angle to each other is:	7N	6N	1N	5N

Paper Code Number: 2472		2025 (1 st -A) INTERMEDIATE PART-I (11 th Class)		Roll No: _____	
PHYSICS PAPER-I GROUP-II					
TIME ALLOWED: 20 Minutes			OBJECTIVE	MAXIMUM MARKS: 17	
Q.No.1	You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that bubble in front of that question number, on bubble sheet. Use marker or pen to fill the bubbles. Cutting or filling two or more bubbles will result in zero mark in that question.				
S.#	QUESTIONS	A	B	C	D
1	The triple point of water is:	273.16° C	273.16° F	273.16K	373K
2	The value of $\frac{C_p}{C_v}$ for diatomic gases is:	1.50	1.40	1.67	1.29
3	The light emitted by LED has wavelength:	1.3 μm	1.4 μm	1.2 μm	1.5 μm
4	A diffraction grating has 5000 lines per centimeter. Its grating element is:	$2.0 \times 10^{-4} m$	$1.0 \times 10^{-6} m$	$1.0 \times 10^{-4} m$	$2.0 \times 10^{-6} m$
5	A set of frequencies which is an integral multiple of fundamental frequency is called:	Beat frequency	Harmonics	S.H.M	Ultrasonics
6	In SONAR we use:	Heat waves	Light waves	Sound waves	Microwaves
7	At which displacement K.E and P.E in S.H.M will be equal:	x_o	$\frac{1}{\sqrt{2}} x_o$	$\frac{1}{2} x_o$	$\frac{1}{4} x_o$
8	$m^3 s^{-1}$ is the unit of:	Flow rate	Impulse	Viscosity	Momentum
9	The ratio of escape velocity to critical velocity is:	$\sqrt{1.2}$	2	$\frac{1}{\sqrt{2}}$	$\sqrt{2}$
10	_____ is not conservative.	Electric force	Magnetic force	Frictional force	Gravitational force
11	One properly placed Geostationary Satellite covers maximum of Longitude:	200°	120°	160°	240°
12	The ratio of height to range of projectile is:	$\frac{1}{4} \tan \theta$	$4 \tan \theta$	$4 \cot \theta$	$\frac{1}{4} \cot \theta$
13	When rocket moves upward, its acceleration:	Decreases	Remains same	Falls inversely	Goes on increasing
14	Two vectors to be combined have magnitudes 65N and 30N. The correct answer for resultant may be:	70N	15N	20N	100N
15	The magnitude of cross product and dot product will be equal if angle is:	90°	45°	0°	180°
16	1 solid sphere is equal to:	2 π Steradian	6 π Steradian	4 π Steradian	8 π Steradian
17	Absolute uncertainties are added in following operation:	Subtraction	Power factor	Multiplication	Division

Paper Code Number: 2474		2025 (1 st -A) INTERMEDIATE PART-I (11 th Class)		Roll No: _____	
PHYSICS PAPER-I GROUP-II					
TIME ALLOWED: 20 Minutes		OBJECTIVE		MAXIMUM MARKS: 17	
Q.No.1	You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that bubble in front of that question number, on bubble sheet. Use marker or pen to fill the bubbles. Cutting or filling two or more bubbles will result in zero mark in that question.				
S.#	QUESTIONS	A	B	C	D
1	$m^3 s^{-1}$ is the unit of:	Flow rate	Impulse	Viscosity	Momentum
2	The ratio of escape velocity to critical velocity is:	$\sqrt{1.2}$	2	$\frac{1}{\sqrt{2}}$	$\sqrt{2}$
3	_____ is not conservative.	Electric force	Magnetic force	Frictional force	Gravitational force
4	One properly placed Geostationary Satellite covers maximum of Longitude:	200°	120°	160°	240°
5	The ratio of height to range of projectile is:	$\frac{1}{4} \tan \theta$	$4 \tan \theta$	$4 \cot \theta$	$\frac{1}{4} \cot \theta$
6	When rocket moves upward, its acceleration:	Decreases	Remains same	Falls inversely	Goes on increasing
7	Two vectors to be combined have magnitudes 65N and 30N . The correct answer for resultant may be:	70N	15N	20N	100N
8	The magnitude of cross product and dot product will be equal if angle is:	90°	45°	0°	180°
9	1 solid sphere is equal to:	2π Steradian	6π Steradian	4π Steradian	8π Steradian
10	Absolute uncertainties are added in following operation:	Subtraction	Power factor	Multiplication	Division
11	The triple point of water is:	273.16°C	273.16°F	273.16K	373K
12	The value of $\frac{C_p}{C_v}$ for diatomic gases is:	1.50	1.40	1.67	1.29
13	The light emitted by LED has wavelength:	$1.3 \mu m$	$1.4 \mu m$	$1.2 \mu m$	$1.5 \mu m$
14	A diffraction grating has 5000 lines per centimeter. Its grating element is:	$2.0 \times 10^{-4} m$	$1.0 \times 10^{-6} m$	$1.0 \times 10^{-4} m$	$2.0 \times 10^{-6} m$
15	A set of frequencies which is an integral multiple of fundamental frequency is called:	Beat frequency	Harmonics	S.H.M	Ultrasonics
16	In SONAR we use:	Heat waves	Light waves	Sound waves	Microwaves
17	At which displacement K.E and P.E in S.H.M will be equal:	x_o	$\frac{1}{\sqrt{2}} x_o$	$\frac{1}{2} x_o$	$\frac{1}{4} x_o$

Paper Code Number: 2476		2025 (1 st -A) INTERMEDIATE PART-I (11 th Class)		Roll No: _____	
PHYSICS PAPER-I GROUP-II					
TIME ALLOWED: 20 Minutes		OBJECTIVE		MAXIMUM MARKS: 17	
Q.No.1	You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that bubble in front of that question number, on bubble sheet. Use marker or pen to fill the bubbles. Cutting or filling two or more bubbles will result in zero mark in that question.				
S.#	QUESTIONS	A	B	C	D
1	The ratio of height to range of projectile is:	$\frac{1}{4} \tan \theta$	$4 \tan \theta$	$4 \cot \theta$	$\frac{1}{4} \cot \theta$
2	When rocket moves upward, its acceleration:	Decreases	Remains same	Falls inversely	Goes on increasing
3	Two vectors to be combined have magnitudes $65N$ and $30N$. The correct answer for resultant may be:	$70N$	$15N$	$20N$	$100N$
4	The magnitude of cross product and dot product will be equal if angle is:	90°	45°	0°	180°
5	1 solid sphere is equal to:	2π Steradian	6π Steradian	4π Steradian	8π Steradian
6	Absolute uncertainties are added in following operation:	Subtraction	Power factor	Multiplication	Division
7	The triple point of water is:	$273.16^\circ C$	$273.16^\circ F$	$273.16K$	$373K$
8	The value of $\frac{C_p}{C_v}$ for diatomic gases is:	1.50	1.40	1.67	1.29
9	The light emitted by LED has wavelength:	$1.3 \mu m$	$1.4 \mu m$	$1.2 \mu m$	$1.5 \mu m$
10	A diffraction grating has 5000 lines per centimeter. Its grating element is:	$2.0 \times 10^{-4} m$	$1.0 \times 10^{-6} m$	$1.0 \times 10^{-4} m$	$2.0 \times 10^{-6} m$
11	A set of frequencies which is an integral multiple of fundamental frequency is called:	Beat frequency	Harmonics	S.H.M	Ultrasonics
12	In SONAR we use:	Heat waves	Light waves	Sound waves	Microwaves
13	At which displacement K.E and P.E in S.H.M will be equal:	x_o	$\frac{1}{\sqrt{2}} x_o$	$\frac{1}{2} x_o$	$\frac{1}{4} x_o$
14	$m^3 s^{-1}$ is the unit of:	Flow rate	Impulse	Viscosity	Momentum
15	The ratio of escape velocity to critical velocity is:	$\sqrt{1.2}$	2	$\frac{1}{\sqrt{2}}$	$\sqrt{2}$
16	_____ is not conservative.	Electric force	Magnetic force	Frictional force	Gravitational force
17	One properly placed Geostationary Satellite covers maximum of Longitude:	200°	120°	160°	240°

Paper Code Number: 2478		2025 (1 st -A) INTERMEDIATE PART-I (11 th Class)		Roll No: _____	
PHYSICS PAPER-I GROUP-II					
TIME ALLOWED: 20 Minutes			OBJECTIVE		MAXIMUM MARKS: 17
Q.No.1	You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that bubble in front of that question number, on bubble sheet. Use marker or pen to fill the bubbles. Cutting or filling two or more bubbles will result in zero mark in that question.				
S.#	QUESTIONS	A	B	C	D
1	The magnitude of cross product and dot product will be equal if angle is:	90°	45°	0°	180°
2	1 solid sphere is equal to:	2π Steradian	6π Steradian	4π Steradian	8π Steradian
3	Absolute uncertainties are added in following operation:	Subtraction	Power factor	Multiplication	Division
4	The triple point of water is:	$273.16^\circ C$	$273.16^\circ F$	$273.16K$	$373K$
5	The value of $\frac{C_p}{C_v}$ for diatomic gases is:	1.50	1.40	1.67	1.29
6	The light emitted by LED has wavelength:	$1.3 \mu m$	$1.4 \mu m$	$1.2 \mu m$	$1.5 \mu m$
7	A diffraction grating has 5000 lines per centimeter. Its grating element is:	$2.0 \times 10^{-4} m$	$1.0 \times 10^{-6} m$	$1.0 \times 10^{-4} m$	$2.0 \times 10^{-6} m$
8	A set of frequencies which is an integral multiple of fundamental frequency is called:	Beat frequency	Harmonics	S.H.M	Ultrasonics
9	In SONAR we use:	Heat waves	Light waves	Sound waves	Microwaves
10	At which displacement K.E and P.E in S.H.M will be equal:	x_o	$\frac{1}{\sqrt{2}} x_o$	$\frac{1}{2} x_o$	$\frac{1}{4} x_o$
11	$m^3 s^{-1}$ is the unit of:	Flow rate	Impulse	Viscosity	Momentum
12	The ratio of escape velocity to critical velocity is:	$\sqrt{1.2}$	2	$\frac{1}{\sqrt{2}}$	$\sqrt{2}$
13	_____ is not conservative.	Electric force	Magnetic force	Frictional force	Gravitational force
14	One properly placed Geostationary Satellite covers maximum of Longitude:	200°	120°	160°	240°
15	The ratio of height to range of projectile is:	$\frac{1}{4} \tan \theta$	$4 \tan \theta$	$4 \cot \theta$	$\frac{1}{4} \cot \theta$
16	When rocket moves upward, its acceleration:	Decreases	Remains same	Falls inversely	Goes on increasing
17	Two vectors to be combined have magnitudes $65N$ and $30N$. The correct answer for resultant may be:	$70N$	$15N$	$20N$	$100N$

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