Roll	No:		4	

# INTERMEDIATE PART-I (11th CLASS)

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(NEW SCHEME)

(SESSION 2015-2017)

TIME ALLOWED: 2.40 Hours

SUBJECTIVE

MAXIMUM MARKS: 68

NOTE: - Write same question number and its part number on answer book, as given in the question paper.

SECTION-I

## Attempt any eight parts.

 $8 \times 2 = 16$ 

- (i) What are the dimensions and units of gravitational constant 'G' in the formula  $F = \frac{Gm_1m_2}{r^2}$ .
- (ii) Why do we find it useful to have two units for the amount of a substance, the kilogram and the mole?
- (iii) Name two steps required to measure a base quantity.
- (iv) If voltage  $V = 5.2 \pm 0.1$  volt and current  $I = 0.84 \pm 0.05 A$ . Find resistance in conductor by calculating total uncertainty.
- (v) What is a Position Vector? Draw position vector in plane and space and write down their magnitudes.
- (vi) State and illustrate right hand rule for vector product of two vectors  $\vec{A}$  and  $\vec{B}$ .
- (vii) Two vectors have unequal magnitudes. Can their sum be zero? Explain.
- (viii) Which quantity is obtained by taking slope of a velocity-time graph? If graph is a (a) straight line inclined at x-axis (b) a curve
- (ix) Hitting a stone by your toe will hurt you more that to a football. Explain.
- (x) Motion with constant velocity is a special case of motion with constant acceleration. Is this statement true? Discuss.
- (xi) Define Ballistic Missile and Ballistic Trajectory.
- (xii) A person is standing near a fast moving train. Is there any danger that he will fall towards it?

### Attempt any eight parts.

 $8 \times 2 = 16$ 

- (i) Is the work done by a force ever be negative? Explain.
- (ii) Work done by an agency is 2 kWh. Convert it into Joules.
- (iii) A glass is dropped from a certain height which breaks into pieces. What energy changes are involved?
- (iv) Define arc and radius of a circle and relate them.
- (v) What is the physical significance of moment of inertia? Explain,
- (vi) Why does a diver change his body positions before and after diving in the pool?
- (vii) What are the conditions for simple harmonic motion of a body?
- (viii) What is the difference between free and forced oscillations?
- (ix) What is the period and frequency of a simple pendulum at the centre of earth? Where g is zero.
- (x) State the Principle of Super Position.
- (xi) How should a source of sound make with respect to an observer so that the frequency of the sound does not change?
- (xii) Define beats and give at least one use of beats.

### Attempt any six parts.

 $6 \times 2 = 12$ 

- (i) Define Wavefront. What is the usual way to obtain plane wave from a point source of light?
- (ii) How would you manage to get more orders of spectra using a diffraction grating?
- (iii) Can visible light produce interference fringes? Explain.

- (iv) In astronomical telescope, why objective of large aperture is used?
- (v) Explain the difference between angular magnification and resolving power of an optical instrument.
- (vi) Why is the average velocity of the molecule in a gas is zero but the average of the square of velocities is not zero?
- (vii) Give two examples of a natural process that involves an increase in entropy.
- (viii) Is it possible to convert internal energy into mechanical energy? Explain with an example.
- (ix) Explain, how human metabolism is an example of energy conservation?

### SECTION-II

#### NOTE: - Attempt any three questions.

5.(a) Define Projectile Motion and derive the relation for (i) Height of the projectile reached (ii) Range of the projectile

5

3

(b) Find the projection of vector  $\vec{A} = 2\hat{i} - 8\hat{j} + \hat{k}$  in the direction of vector  $\vec{B} = 3\hat{i} - 4\hat{j} - 12\hat{k}$ 

5

6.(a) Prove that work done by Gravitational Field is independent of the path followed. What you conclude from this?

3

(b) What should be the orbiting speed to lunch a satellite in a circular orbit 900 km above the surface of the Earth?

5

7.(a) State and derive Bernoulli's Equation.

Mention its two applications.

Find the focal length of the lenses.

9.(a)

3

(b) A Carnot engine whose low temperature reservoir is at 7°C has an efficiency of 50 %, If is desired to increase the efficiency to 70 %. By how many degrees the temperature of the source be increased?

5

8.(a) Define Stationary waves. Derive an expression for stationary waves in a stretched string have discrete set of frequencies.

3

(b) A block of mass 4 kg is dropped from a height of 0.80m on to a spring of spring constant  $K = 1960 \, Nm^{-1}$ . Find the maximum distance through which the spring will be compressed

1+1+1+1+1=5

(b) An astronomical telescope having magnifying power of 5 consist of two thin lenses 24 cm apart.

What is Michelson's Interferometer? Describe its principle, construction and working.

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Paper	Code			017 (S)	Roll No.
Numb	er:	2471	INTERMEDIA	TE PART-I (11 <sup>th</sup> C	CLASS)
	SICS		1	HEME) (SES	SION 2015-2017)
		OWED: 20	Minutes	OBJECTIVE	MAXIMUM MARKS: 1
Cuttin as giv	ng or f en in o SLES a	illing two or m	rcie in front of that o fore circles will resul question paper and le	luestion number. Use t in zero mark in the	B, C and D. The choice which you e marker or pen to fill the circles. t question. Attempt as many question o credit will be awarded in case JECTIVE PAPER.
(1)	An	example of bas	se quantity ist-		
	(A)	) Area	(B) Volume	(C) Length	(D) Velocity
(2)	The	e cross product	of $\hat{k} \times \hat{j}$ is equal to:-		
	(A)	î	(B) <i>j</i>	(C) $\vec{k}$	(D) - i
(3)	The	e slope of veloc	city-time graph represe	ents:-	
	(A)	Force	(B) Acceleration	(C) Power	(D) Energy
(4)	Ho	rizontal range i	s maximum when ang	le of projection is:-	
		36"	(B) 45 <sup>n</sup>	(C) 15"	(D) 10°
(5)	Αb	ody of mass 21	g moving with veloci	ty of 4ms <sup>-1</sup> has K.E.eq	rual to:-
	(A)		(B) 8 J	(C) 32 J	(D) 2 J
(6)	The	formula for the	speed of satellite orbi	ting around the Earth i	
	(A)	$v = \sqrt{2gr}$	(B) $v = \sqrt{2gR}$	(C) $v = \sqrt{gR}$	(D) $v = \sqrt{\frac{gR}{M}}$
(7)	100	radians are equ	al to:-		V 47
	(A)	57.3"	(B) 573°	(C) 5730°	(D) 5.73"
(8)	Ang	ular acceleratio	on is produced by:-		X 4
	(A)	Powez	(B) Torque	(C) Pressure	(D) P.E
(9)	Bloc	ed pressure is n	icasures by:-		
	(A) F	lydrometer	(B) Barometer	(C) Galvanometer	(D) Sphygmomanometer
(10)	Freq	nency and time	period are related as:	-	
	(A)	$fT^{-1}=1$	(B) $fT^{-2} = 1$	(C) $f^{-1}T = 1$	(D) $fT = 1$
(11)	The	velocity of sou	nd in air at 0°C is:-		
	(A)	$332ms^{-1}$	(B) 332cms <sup>-1</sup>	(C) 222ms <sup>-1</sup>	(D) Zero
(12)	Wav	elength of a wa	ave for closed pipe hav	ving length 'l' in the f	The second of th
		2ℓ	(B) ½	(C) 4 <i>t</i>	(D) ℓ
(13)	Vibi	rating tuning fo	ork is a source of:-		
	(A) 7	Torque	(B) Heat	(C) Light	(D) Sound
(14)	The	wavelength of	x - rays is of the orde	r of:-	
	(A) 1	0m	(B) 10 <sup>-10</sup> m	(C) $10^{-2}m$	(D) 10cm
(15)	Mult	i-mode step inc	dex fibre is useful for:		
	(A)	Long distance	(B) Short distance	(C) Infinite distance	(D) Very long distance
(16)	Acco	rding to first la	w of Thermodynamic	s, the quantity which is	s conserved:-
			(B) Force	(C) Mementum	(D) Power
(17)	The	efficiency of a	Carnot engine is:-		
	(A) li	nfinite	(B) Zero	(C) Less than one	(D) Greater than one

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Paper (	2472		17 (S) E PART-I (11 <sup>th</sup> CI	Roll No
Number	2019 2001 TA A TABLE			
Note: think is Cutting as given	ALLOWED: 20 You have four cho correct, fill that ci or filling two or n in objective type	Minutes ices for each objectivingle in front of that quore circles will result question paper and le	OBJECTIVE  e type question as A, I uestion number. Use t in zero mark in that	ION 2015-2017)  MAXIMUM MARKS: 1  B, C and D. The choice which you marker or pen to fill the circles. question. Attempt as many question credit will be awarded in case ECTIVE PAPER.
(1)	The wavelength o	f x - rays is of the order	er of;-	
	(A) 10m	(B) $10^{-10} m$	(C) $10^{-2} m$	(D) 10cm
(2)	Multi-mode step	index fibre is useful for	ri-	
	(A) Long distance	e (B) Short distance	(C) Infinite distance	(D) Very long distance
(3)	According to first	law of Thermodynami	cs, the quantity which i	s conserved:-
	(A) Energy	(B) Force	(C) Momentum	(D) Power
(4)	The efficiency of	a Carnot engine is:-		
	(A) Infinite	(B) Zero	(C) Less than one	(D) Greater than one
(5)	An example of ba	se quantity is:-		
	(A) Area	(B) Volume	(C) Length	(D) Velocity
(6)	The cross produc	t of $\hat{k} \times \hat{j}$ is equal to:-		
	(A) <i>î</i>	(B) ĵ	(C) k	(D) $-\hat{i}$
(7)	The slope of velo	city-time graph represe	ents:-	
	(A) Force	(B) Acceleration	(C) Power	(D) Energy
(8)	Horizontal range	is maximum when ang	le of projection is:-	A37/43A — 63570
	(A) 30°	(B) 45°	(C) 15°	(D) 10°
(9)	A body of mass 2	kg moving with veloci	ty of 4ms has K.E equ	
E.O.	(A) 16 J	(B) 8 J	(C) 32 J	(D) 2 J
(10)			biting around the Earth	
5.8			(C) $v = \sqrt{gR}$	
(11)	100 radians are e		(C) 1 - Vgh	$(D) V = \sqrt{M}$
(11)		According to the control of	730 32133	1922-1920-2017
(12)	(A) 57.3°	(B) 573°	(C) 5730°	(D) 5.73°
(12)		ation is produced by:-	(CVP	- App. 1870
(12)	(A) Power	(B) Torque	(C) Pressure	(D) P.E
(13)	Blood pressure is		(C) Galumanmatan	(D) S-1
(14)	(A) Hydrometer	(B) Barometer ne period are related as	(C) Galvanometer	(D) Sphygmomanometer
(17)	(A) $fT^{-1} = 1$		(C) $f^{-1}T = 1$	(D) (T)
507-200	AND SAN AND SA	097.W. #2 77	(C) $f I = 1$	(D)  f I = I
(15)		und in air at 0°C is:-		
	(A) $332ms^{-1}$	(B) 332cms <sup>-1</sup>	(C) 222ms <sup>-1</sup>	(D) Zero
(16)	Wavelength of a v	COST	wing length '\ell' in the f	undamental mode is:-
	(A) 2 <i>ℓ</i>	(B) $\frac{\ell}{2}$	(C) 4ℓ	(D) !
(17)		fork is a source of:-		
	(A) Torque	(B) Heat	(C) Light	(D) Sound
			17(Obj)( <b>Tar 2</b>	)-2017(S)-700 (MULTAN)

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	ALLOWED: 20		OBJECTIVE	MAXIMUM MARKS: 1
think is	You have four che s correct, fill that c	oices for each objective circle in front of that o	e type question as A, I uestion number. Use	B, C and D. The choice which you marker or pen to fill the circles.
Cutting	g or filling two or r	nore circles will result	t in zero mark in that o	question. Attempt as many question
BUBBI	LES are not filled.	Do not solve question	eave others blank. No n on this sheet of OBJI	credit will be awarded in case ECTIVE PAPER.
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(1)	(A) 57.3"	(B) 573°	(0) 57308	(T) 5 772
(2)	128. 148. 1512.151	MTM:211-0-51.	(C) 5730°	(D) 5.73°
(4)	Contained	ion is produced by:-	(C) D	(D) D F
(3)	(A) Power Blood pressure is	(B) Torque	(C) Pressure	(D) P.E
(3)	(A) Hydrometer	SAWAY SAY	(C) Galana and a	(D) 6-1
(4)	A Walter Francis	(B) Barometer	(C) Galvanometer	(D) Sphygmomanometer
(4)	CALIFF ECONOMIS IN	me period are related as		TALLES - ANGEL - AT
	(A) $JI^{-}=1$	(B) $fT^{-2} = 1$	(C) $f^{-1}T = 1$	(D) $fT = 1$
(5)	The velocity of so	und in air at 0°C is:-		
	(A) $332ms^{-1}$	(B) 332cms <sup>-1</sup>	(C) 222ms <sup>-1</sup>	(D) Zero
(6)	Wavelength of a	wave for closed pipe ha	wing length $'\ell'$ in the fi	undamental mode is:-
	(A) 2l	(B) ½	(C) 4 <i>ℓ</i>	(D) ℓ
(7)	Vibrating tuning	fork is a source of:-		
	(A) Torque	(B) Heat	(C) Light	(D) Sound
(8)	The wavelength of	of $x$ – rays is of the order	er of:-	
	(A) 10m	(B) $10^{-10} m$	(C) 10 <sup>-2</sup> m	(D) 10cm
(9)	Multi-mode step	index fibre is useful for	1-	
	(A) Long distance	ee (B) Short distance	(C) Infinite distance	(D) Very long distance
(10)	According to first	t law of Thermodynami	ics, the quantity which i	s conserved;-
	(A) Energy	(B) Force	(C) Momentum	(D) Power
(11)	The efficiency of	a Carnot engine is:-		
	(A) Infinite	(B) Zero	(C) Less than one	(D) Greater than one
(12)	An example of b	ase quantity is:-		
	(A) Area	(B) Volume	(C) Length	(D) Velocity
(13)	The cross produc	et of $\hat{k} \times \hat{j}$ is equal to:-		
	(A) î	(B) j	(C) k	(D) $-\hat{i}$
(14)		ocity-time graph represe	1.51.52	
28/2/2000	(A) Force	(B) Acceleration	(C) Power	(D) Energy
(15)	52 10	is maximum when ang	.0. 0	(=/====g/
08:13:36)	(A) 30°	(B) 45°	(C) 15°	(D) 10°
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(10)	(A) 16 J		ty of 4ms <sup>-1</sup> has K.E equ	ACTIVITY OF THE PARTY OF THE PA
(17)	TODAY 200 I MONTA SARETTAN	(B) 8 J	(C) 32 J	(D) 2 J
(17)			iting around the Earth is	promote and the second
	(A) $v = \sqrt{2gr}$	(B) $v = \sqrt{2gR}$	(C) $v = \sqrt{gR}$	(D) $v = \sqrt{\frac{gR}{M}}$

Paper Code		20 INTERMEDIAT	17 (S) E PART-L(11 <sup>th</sup> C	Roll No
Number	2477		21.111111111111111111111111111111111111	LANG)
PHYSI		- Limit		SION 2015-2017)
Note: 'think is Cutting as given	correct, fill that o or filling two or i in objective type	oices for each objective ircle in front of that quore circles will result	uestion number. Use in zero mark in that ave others blank. No	MAXIMUM MARKS: 1 B, C and D. The choice which you e marker or pen to fill the circles. question. Attempt as many question o credit will be awarded in case JECTIVE PAPER.
(1)	A body of mass 21	eg moving with velocity	of 4ms-1 has K.E equ	ual to;-
	(A) 16 J	(B) 8 J	(C) 32 J	(D) 2 J
(2)	The formula for th	ne speed of satellite orbi	ting around the Earth	174 W.
	(A) $v = \sqrt{2gr}$	(B) $v = \sqrt{2gR}$	(C) $v = \sqrt{gR}$	(D) $v = \sqrt{\frac{gR}{M}}$
(3)	100 radians are ed	qual to:-		1 24
	(A) 57.3"	(B) 573°	(C) 5730°	(D) 5.73"
(4)	Angular accelerat	ion is produced by:-		
	(A) Power	(B) Torque	(C) Pressure	(D) P.E
(5)	Blood pressure is	measures by:-		
	(A) Hydrometer	(B) Barometer	(C) Galvanometer	(D) Sphygmomanometer
(6)	Frequency and tir	ne period are related as:		
	(A) $fT^{-1} = 1$	(B) $fT^{-2} = 1$	(C) $f^{-1}T = 1$	(D) $fT = 1$
(7)	The velocity of so	ound in air at 0°C is:-		
	(A) 332ms <sup>-1</sup>	(B) 332cms <sup>-1</sup>	(C) 222ms <sup>-1</sup>	(D) Zero
(8)	Wavelength of a	wave for closed pipe ha	ving length 'ℓ' in the	fundamental mode is:-
	(A) 2ℓ	(B) ½	(C) 4ℓ	(D) \( \ell \)
(9)	Vibrating tuning	fork is a source of:-		
	(A) Torque	(B) Heat	(C) Light	(D) Sound
(10)	The wavelength	of $x$ – rays is of the order	er of:-	
	(A) 10m	(B) $10^{-10}$ m	(C) 10 <sup>-2</sup> m	(D) 10cm
(11)	Multi-mode step	index fibre is useful for	: <del>-</del>	
	(A) Long distance	e (B) Short distance	(C) Infinite distance	(D) Very long distance
(12)	According to firs	t law of Thermodynami	cs, the quantity which	is conserved:-
	(A) Energy	(B) Force	(C) Momentum	(D) Power
(13)	The efficiency of	a Carnot engine is:-		
	(A) Infinite	(B) Zero	(C) Less than one	(D) Greater than one
(14)	An example of b	ase quantity is:-		
	(A) Area	(B) Volume	(C) Length	(D) Velocity
(15)	The cross produc	t of $\hat{k} \times \hat{j}$ is equal to:-		
	(A) $\hat{i}$	(B) <i>j</i>	(C) k	(D) $-\hat{i}$
(16)	The slope of velo	city-time graph represe	nts:-	W 70
	(A) Force	(B) Acceleration	(C) Power	(D) Energy
(17)	Horizontal range	is maximum when angl	e of projection is:-	anseworkswitchsoks (###)
	(A) 30°	(B) 45°	(C) 15°	(D) 10°
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Roll No:

## INTERMEDIATE PART-I (11th CLASS)

PHYSICS PAPER-I (OLD SCHEME) (SESSION 2012-2014)

TIME ALLOWED: 3.10 Hours

SUBJECTIVE

MAXIMUM MARKS: 83

NOTE: - Write same question number and its part number on answer book, as given in the question paper.

SECTION-I

Q.No.2 Attempt any eight parts.

 $8 \times 2 = 16$ 

- (i) The period of simple pendulum is measured by a stop watch. What types of errors are possible in the time period?
- (ii) The wavelength of a wave depends on the speed "V" of the wave and its frequency "f" knowing that  $[\lambda] = [L], [V] = [LT^{-1}]$  and  $[f] = [T^{-1}]$ . Decide which of the following is correct,  $f = \nu \lambda$  or  $f = \frac{\nu}{\lambda}$ .
- (iii) Write the dimensions of (i) Pressure (ii) Density
- (iv) Define (i) Random error (ii) Systematic error
- (v) Can a vector have a component greater than the vectors magnitude?
- (vi) Two vectors have unequal magnitudes. Can their sum be zero? Explain.
- (vii) If A + B = 0, what can you say about the components of the two vectors?
- (viii) Point out the importance of an Isolated System.
- (ix) Explain the circumstances in which the
   (i) Parallel (ii) Antiparallel
   velocity "v" and acceleration 'a' of a car are:-
- (x) Show that the range of projectile is maximum when projectile is thrown at an angle of 45° with the horizontal.
- (xi) Write two uses of velocity time graph.
- (xii) A person is standing near a fast moving train. Is there any danger that he will fall towards it?

Q.No.3 Attempt any eight parts.

 $8 \times 2 = 16$ 

- (i) A girl drops a cup from a certain height, which breaks into pieces. What energy changes are involved?
- (ii) When a rocket re-enters the atmosphere, its nose cone becomes very hot. Where does this energy come from?
- (iii) Define and explain Escape Velocity.
- (iv) What is meant by Moment of Inertia? Explain its significance.
- (v) A disc and a hoop start moving down from the top of an inclined plane at the same time. Which one will be moving faster on reaching the bottom?
- (vi) Calculate the orbital speed of geo-stationary satellite.
- (vii) Does frequency depends on amplitude for harmonic oscillators? Explain.
- (viii) In relation to SHM, explain the equations (i)  $Y = ASin(wt + \phi)$  (ii)  $a = -w^2x$
- (ix) Differentiate between Free and Forced Oscillations.
- (x) Why does sound travel faster in solid than in gases?
- (xi) Briefly explain Principle of Superposition of Waves.
- (xii) Write two applications of Doppler Effect.

Q.No.4 Attempt any six parts.

 $6 \times 2 = 12$ 

- (i) Under what conditions two or more sources of light behave as coherent sources?
- (ii) Can a visible light produce interference fringes? Explain.
- (iii) An oil film spreading over a wet footh path show colours. Explain.
- (iv) Why would it be advantages to use blue light with compound microscope?
- (v) If a person looking through the telescope a full moon, how would the appearance of the moon be changed by covering half of the objective lens?
- (vi) Does Entropy of a System increase or decrease due to friction? Explain.
- (vii) A thermos flask containing milk as a system is shaken rapidly. Does the temperature of the milk rises?
- (viii) Is it possible to construct a heat engine without sink? Explain.
- (ix) Why is the average of velocity of a molecule is zero but average of square of velocity is not zero?

## SECTION-II

## NOTE: - Attempt any three questions of the following:-

- 5.(a) What is Projectile Motion? Find a relation for height and range of projectile. 1+2+2=5
  - (b) What is the unit vector in the direction of the vector  $\vec{A} = 4\hat{i} + 3\hat{j}$
- 6.(a) What is the difference between Real and Apparent Weight? Discuss the variation of apparent weight in lift moving up and down with an acceleration with respect to lift at rest. 1+1+1+1=5
- (b) How large a force is required to accelerate an electron from rest to a speed of  $2.0 \times 10^7 ms^{-1}$  through a distance of 5.0 cm?
- 7.(a) State & prove Bernoulli's equation. 1 + 4 = 5
- (b) A mechanical engineer develops an engine, working between 327" C and 27" C and claims to have an efficiency of 52 %. Does he claim correctly? Explain.
   3
- 8.(a) What is the effect of temperature on speed of sound?

  Derive the relation  $V_t = V_o + 0.61t$  1 + 4 = 5
  - (b) Find the amplitude, frequency and period of an object vibrating at the end of a spring, if the equation for its position, as a function of time, is  $x = 0.25 Cos \left(\frac{\pi}{8}\right) t$ . What is the displacement of the object after 2.0 sec?
- 9.(a) What is Simple Microscope? Draw its rays diagram and derive an expression for the magnification of simple microscope.

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  - (b) Sodium light  $(\lambda = 589 \, mm)$  is incident normally on a grating having 3000 lines per centimeter. What is the highest order of the spectrum obtained with this grating?

### SECTION-III (PRACTICAL)

### 10. (A) Write answers of any four parts.

- 4 × 2 = 8

  (ii) State Second Condition of Equilibrium.
- (i) What is meant by Zero Error?(iii) What is Resolution of a Vector?
- (iv) What is Spring Constant? Write its unit.
- (v) What is Critical Angle?
- (vi) What is Law of Tension?
- (vi) What is meant by Resonance?
- (viii) What is Magnifying Glass?
- (B) Write down the brief procedure to show that time period of simple pendulum is independent of the mass of the bob.

#### OR

Write down the brief procedure to find speed of sound using resonance tube apparatus by End correction method.

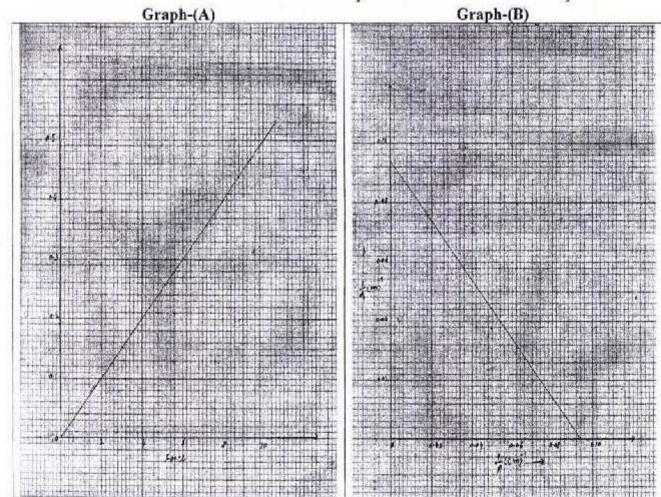
(C) Answer the following questions on the basis of graph drawn below:-

 $2 \times 2 = 1$ 

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- (A) (i) What do you infer from the graph? OR (B) (i) Find the focal length of lens from the graph.
  - (ii) Find the slope of the graph.
- (ii) When  $\frac{1}{p} = 0.07(cm)^{-1}$ . Find value of  $\frac{1}{q}$ .



Paper Code		2017 (S) INTERMEDIATE PART-I (11th C		Roll No			
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PHYS	하시가 있었습니다. 그 그 내 집중에 집 전 시에로 가장하시다	(000000	IEN	IE) (SI	ESSI	ON 2012-	2014)
	ALLOWED: 20		OB	JECTIVE	;	MA	XIMUM MARKS: 17
Cuttings give BUBBI Q.No.1	g or filling two or n n in objective type of LES are not filled.	rcle in front of that quality of the circles will result question paper and lead to be not solve question	in zo ave o	on number. ero mark in others blank	Use that	marker or p question. Att credit will b	tempt as many questions
(1)	Age of the Earth i						
	(A) $1.4 \times 10^{17}$	(B) $5 \times 10^{17}$	(C)	$3.2 \times 10^7$		(D) $8.6 \times 10^{-1}$	04
(2)	The angle between	$n - \hat{i} + \hat{j}$ and $\hat{J} - \hat{K}$	is:-				
	(A) 30°	(B) 75°	(C)	45"		(D) 60°	
(3)	The velocity time	graph of a particle mov	ving	with constan	t velo		prizontal path:-
		aight line (B) Circle				(D) Not a st	
(4)	If $R = 4H$ , the	angle of projection in p	rojec	tile motion i	s:-		
	(A) 60°	(B) 45°	(C)	76°		(D) 30°	
(5)	is renewable	e energy source.				200	
	(A) Oil	(B) Biomass	(C)	Natural gas		(D) Uraniur	n
(6)	The dimension of	angular displacement i	s:-			W-180-1-100-100-1	
	(A) [L]	(B) [LT <sup>-1</sup> ]	(C)	$T^{-1}$		(D) [L°]	
(7)	orbital velocity 'V,				s two	times then i	ts
(0)		(B) $\frac{1}{\sqrt{2}}V_a$		2		(D) 2V <sub>o</sub>	
(8)		the equator for geostati	6338	STREET			
(0)	(A) 27000 km	(B) 30000 km	Section.	36000 km		(D) 400001	km
(9)		incompressible fluid, t				52107EE A	1911 (91)
(10)	(A) Increases	(B) Remains constant	t (C)	Decreases		(D) First inc	creases then decreases
(10)	(A) 10 Hz	second pendulum is:-	((7)	6.11		(13) 2 13	
(11)	Value of 'y' for po	(B) 0.5 Hz	(C)	5 Hz		(D) 2 Hz	
(11)	(A) 1.4	C3:22 C. C7/6		1.00			
(12)	West of the second	(B) 1.67		1.29		(D) 1.5	
(12)		ve is reflected from the					- M
(13)	phase change of:-	(A) 180°	(B)	360° (	C) 0°	(D)	90"
(13)	(A) Blue shift	rds the earth show:- (B) Red shift	(C)	1/-11	5	(D) (I	1.0
(14)		of polarization of light	I A	Yellow shift		(D) Orange	snin
1-04	(A) Longitudinal			Matter	wave	(D) Transve	PP.A.
(15)		glass is:- (A) 41.8			0		
(16)		ess the temperature:-		(B) 48.6		(C) 43°	(D) 48°
(10)	(A) Increases	(B) Decreases	(C)	Damaina aas	natant	(D) Elmit !	novement than days
(17)	1,500	an ideal gas depends up			istant	(D) First ii	ncreases then decreases
1.0	(A) Volume	(B) Pressure	2000	Entropy		(D) Temper	atura
	(-7) · O.M.	(b) I teasure					
			1	/(Obj)(W)-	2017	(S)-240	(MULTAN)

Paper Coo	de	,	017 (8)	D-UN-
Number:	6473		017 (S) FE PART-I (11 <sup>th</sup>	Roll No
		Chromody Material Appropries		
PHYSICS	S PAPER-I LOWED: 20 M	(0	하는 사람들이 사용을 시작하고 그 그는 그리고 있었다.	SION 2012-2014)
Note: You think is cor Cutting or as given in	have four choi rect, fill that cir filling two or m objective type q	ces for each objective rele in front of that q ore circles will result	uestion number. Us in zero mark in tha ave others blank. N	MAXIMUM MARKS: 1  a, B, C and D. The choice which you se marker or pen to fill the circles. It question. Attempt as many question to credit will be awarded in case BJECTIVE PAPER.
TO TO THE STATE OF	he frequency of s	second pendulum is:-		
(A	A) 10 Hz	(B) 0.5 Hz	(C) 5 Hz	(D) 2 Hz
(2) V	alue of 'y' for po	olyatomic gas is:-		
(A	1.4	(B) 1.67	(C) 1.29	(D) 1.5
(3) If	a transverse way	ve is reflected from the	boundary of a rare r	medium it under goes a
ph	nase change of:-	(A) 180°	(B) 360° (C)	0° (D) 90°
(4) St	ars moving towa	ards the earth show:-		
(A	A) Blue shift	(B) Red shift	(C) Yellow shift	(D) Orange shift
(5) TI	ne phenomenon	of polarization of light	reveals that light wa	ives arc:-
(A	A) Longitudinal	(B) Mechanical	(C) Matter	(D) Transverse
(6) Ci	ritical angle for g	glass is:- (A) 41.	8° (B) 48.6°	(C) 43° (D) 48°
(7) In	isothermal proc	ess the temperature:-		
(A	A) Increases	(B) Decreases	(C) Remains const	ant (D) First increases then decreases
(8) In	ternal energy of	an ideal gas depends t	ipon:-	
(A	(1) Volume	(B) Pressure	(C) Entropy	(D) Temperature
(9) A	ge of the Earth in	n seconds is:-		
(A	$(1.4 \times 10^{17})$	(B) $5 \times 10^{17}$	(C) $3.2 \times 10^7$	(D) $8.6 \times 10^4$
(10) Ti	ne angle between	$1 - \hat{i} + \hat{j}$ and $\hat{J} - \hat{k}$	is:-	
(A	A) 30°	(B) 75°	(C) 45°	(D) 60°
TAKE A PERSON NAMED IN		400 400		elocity along horizontal path:-
		aight line (B) Circle		(D) Not a straight line
		angle of projection in p		
	A) 60°	(B) 45"	(C) 76°	(D) 30°
150	450 DOCO	e energy source.	(0) /0	(13) 34
(0)	N) Oil	(B) Biomass	(C) Natural gas	(D) Uranium
12.		angular displacement	The Section of the State of the	V-1 - minim
	A) [L]	(B) [LT <sup>-1</sup> ]		$(D)$ $L^{o}$
(15) If		satellite form the cen	50	
(A	$\sqrt{2}V_{a}$	(B) $\frac{1}{\sqrt{2}}V_a$	(C) $\frac{1}{2}V_{n}$	(D) 2V <sub>a</sub>
		√2 the equator for geostat	an 1946	
	k) 27000 km	(B) 30000 km	(C) 36000 km	(D) 40000 km
1001 120 MO		incompressible fluid,	The second	(m) waxa min
N 20	107	(B) Remains constar		(D) First increases then decreases
Δ*		A A STATE OF THE S		Company of the Compan
			1/(Obj)(WW)	)-2017(S)-2 40 (MULTAN)

Paper (				2017 (S)		D.	.11 N.		
Numbe	r: 647	75	INTERMEDIA	ATE PAR	Γ-I (11 <sup>th</sup>	CLASS)	oll No )	)	
PHYSI TIME A	CS PAPI	15.05.05-1		CHEME) OBJEC		SION 20			MARKS: 17
think is Cutting as given BUBBL Q.No.1	correct, fill th or filling two in objective t ES are not fill	at circ or mo ype qu led. D	es for each objecti le in front of that re circles will resu estion paper and o not solve questi	ive type que question nu ilt in zero m leave others on on this si	stion as A umber. Us ark in tha blank. N heet of OI	s, B, C and se marker at question so credit v BJECTIV	D. Tor pe o. Atte vill be E PAI	he choice in to fill the empt as m awarded PER.	which you ne circles. any questions
	orbital velocit	y 'V <sub>o</sub> ' l				two times t	hen its	S	
	(A) $\sqrt{2}V_{o}$		(B) $\frac{1}{\sqrt{2}}V_o$	(C) $\frac{1}{2}V$		(D) 2	$V_{_{\alpha}}$		
(2)	The height ab	ove the	e equator for geosta	ationary sate	llite is:-				
	(A) 27000 km	n	(B) 30000 km	(C) 3600	00 km	(D) 40	)000 k	im	
(3)	For steady flo	ow of i	ncompressible flui	d, the density	y:-				
	(A) Increases	;	(B) Remains const	ant (C) Deci	reases	(D) Fi	rst inc	reases ther	n decreases
(4)	The frequence	y of se	cond pendulum is:	-					
	(A) 10 Hz		(B) 0.5 Hz	(C) 5 Hz	1	(D) 2 l	Hz		
(5)	Value of 'γ'	for pol	yatomic gas is:-						
	(A) 1.4		(B) 1.67	(C) 1.29		(D) 1.:	5		
(6)	If a transvers	e wave	is reflected from t	he boundary	of a rare i	medium it	under	goes a	
	phase change	of:-	(A) 180°	(B) 360°	(C)	0"	(D) §	90"	
(7)	Stars moving	toward	is the earth show:-						
	(A) Blue shif	î	(B) Red shift	(C) Yell	ow shift	(D) Or	ange :	shift	
(8)	The phenome	enon of	polarization of lig	ht reveals th	at light wa	ives are:-			
	(A) Longitud	dinal	(B) Mechanical	(C) Matt	ter	(D) Tr	ansver	rse	
(9)	Critical angle	for gi	ass is:- (A) 4	1.8" (	B) 48.6°	(C) 43	5	(D) 48°	
(10)	In isothermal	proces	ss the temperature:	40 C					
	(A) Increase	s	(B) Decreases	(C) Rem	ains const	tant (D) I	irst ir	creases th	en decreases
(11)	Internal ener	gy of a	n ideal gas depend	s upon:-					
	(A) Volume		(B) Pressure	(C) Entr	ору	(D) Te	mpera	ature	
(12)	Age of the l	Earth in	seconds is:-						
	(A) $1.4 \times 10^{1}$	7	(B) $5 \times 10^{17}$	(C) 3.2	× 10 <sup>7</sup>	(D) 8.	6 × 10	4	
(13)	The angle be	tween	$-\hat{i} + \hat{j}$ and $\hat{J}$ –	$\hat{K}$ is:-					
	(A) 30°		(B) 75 <sup>2</sup>	(C) 45°		(D) 60	) o		
(14)	3,224 333		raph of a particle n	2000 M		2052260.770		izontal pa	th:-
			ght line (B) Circl			700000000000000000000000000000000000000	107-1	aight line	
(15)			gle of projection in			100.300			
3.71508	(A) 60°		(B) 45°	(C) 76°		(D) 3	00		
(16)			energy source.	(C) 70		(0) 3	U.		
(10)	(A) Oil		(B) Biomass	(C) Nati	iral gas	(D) U	raniun		
(17)	58/2 67/5 150		ngular displacemer		man Bas	(D) (I	.acmilli		
()					1	an L	r» 1		
	(A) $[L]$		(b) [LI ]	(C) [T-				. <b>15</b>	
				17(Ol	j)( <b>uu</b>	<b>1</b> )-2017(	(s)- 2	-40 (M	ULTAN)

a laper	6477	INTERMEDIA	017 (S) TE PART-I (11 <sup>th</sup> C	Roll No.
Numb	er: UT//	INTERMEDIA	1E FAR1-1(11 (	LA33)
PHYS		1	HEME) (SESS	^^^^^^^ (
Note: think is Cutting as giver	correct, fill that ci gor filling two or m in objective type of ES are not filled.	ices for each objective rele in front of that question paper and le Do not solve question	uestion number. Use t in zero mark in that ave others blank. No n on this sheet of OBJ	MAXIMUM MARKS: 1' B, C and D. The choice which you marker or pen to fill the circles. question. Attempt as many question credit will be awarded in case JECTIVE PAPER.
(1)	If $R = 4H$ , the	angle of projection in	projectile motion is:-	
	(A) 60°	(B) 45°	(C) 76°	(D) 30°
(2)	is renewab	le energy source.		
	(A) Oil	(B) Biomass	(C) Natural gas	(D) Uranium
(3)		angular displacement		
	(A) $[L]$	(B) $\left[LT^{-1}\right]$	(C) $[T^{-1}]$	(D) $[L^0]$
(4)	orbital velocity 'I	becomes:-	ter of earth increases to	wo times then its
	(A) $\sqrt{2}V_o$	(B) $\frac{1}{\sqrt{2}}V_o$	(C) $\frac{1}{2}V_{o}$	(D) 2V <sub>o</sub>
(5)		√2 the equator for geostat	-	
	(A) 27000 km	(B) 30000 km		(D) 40000 km
(6)	For steady flow of	f incompressible fluid,		**************************************
	(A) Increases	(B) Remains consta		(D) First increases then decreases
(7)	The frequency of s	second pendulum is:-		
	(A) 10 Hz	(B) 0.5 Hz	(C) 5 Hz	(D) 2 Hz
(8)	Value of 'y' for po	olyatomic gas is:-		
	(A) 1.4	(B) 1.67	(C) 1.29	(D) 1.5
(9)	If a transverse way	e is reflected from the	boundary of a rare me	edium it under goes a
	phase change of:-		(B) 360° (C) 0	
(10)	Stars moving towa	ards the earth show:-		8
	(A) Blue shift	(B) Red shift	(C) Yellow shift	(D) Orange shift
(11)	The phenomenon	of polarization of ligh	t reveals that light way	es are:-
		(B) Mechanical	(C) Matter	(D) Transverse
(12)	Critical angle for	glass is:- (A) 41	.8° (B) 48.6°	(C) 43° (D) 48°
(13)	In isothermal proc	cess the temperature:-	125.05	1808
	(A) Increases	(B) Decreases	(C) Remains constan	nt (D) First increases then decreases
(14)	Internal energy of	an ideal gas depends	upon:-	70.50
	(A) Volume	(B) Pressure	(C) Entropy	(D) Temperature
(15)	Age of the Earth	in seconds is:-		
	(A) $1.4 \times 10^{17}$	(B) $5 \times 10^{17}$	(C) $3.2 \times 10^7$	(D) $8.6 \times 10^4$
(16)		en $-\hat{i} + \hat{j}$ and $\hat{j} -$	James and States of Company	No. of
1.00				(IN (I))
(17)	(A) 30°	THE WALL BUILDING	(C) 45°	(D) 60°
(17)			ne danama danama danaman danaman	elocity along horizontal path:-
	(A) Horizontal str			(D) Not a straight line
		17(C	bj)(1212122)-201	17(S)-2 LAD (MULTAN)

BOARD OF INTERMEDIATE AND SECONDARY EDUCATION,

MULTAN

	MILLIA		
OBJECTIVE KEY FOR	INTER (PART-	1/H) Annual	Examination, 2017.

Nam	e of Sub	phy	physics		
	p: 1		vew	Schem	
Q. Nos.	Paper Code	Paper Code	Paper Code	Paper Code	
	2471	2473	2475	2477	
1.	C	В	C	Α	
2.	D	В	В	C	
3.	В	Α	D	С	
4.	В	С	D	В	
5.	A	С	A	D	
6.	C	D	C	D	
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12.	С	B	Α	Α	
13.	Α	В	D	C	
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	o Name	Designation	Institution	Mobile No.	Signature	
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