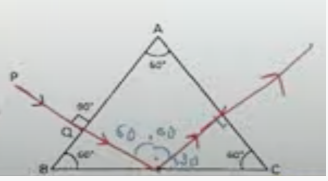
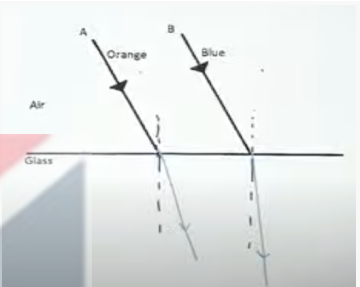


ICSE Class 10 Physics Answer Key 2023

Section A

Question Number	Sub-Part	Answers	
Q1	(i)	B	
	(ii)	D	
	(iii)	B	
	(iv)	B	
	(v)	C	
	(vi)	C	
	(vii)	C	
	(viii)	A	
	(ix)	A	
	(x)	C	
	(xi)	B	
	(xii)	C	
	(xiii)	B	
	(xiv)	C	
	(xv)	D	
Q2	(i)	(a)	When no. of neutrons becomes no. of protons then the nucleus of an atom tends to be radioactive
		(b)	Single Movable Pulley
		(c)	It is used as force multiplier
	(ii)	(a)	Intersection of medians / Centroid
		(b)	Zero

	(iii)	(a)	F_1
		(b)	The perpendicular distance of Force F_1 about pivot O is maximum, that's why it will produce maximum MOF.
	(iv)	(a)	180°
		(b)	Weight
	(v)	30 KW	
	(vi)	(a)	Damped Vibrations
		(b)	Decreasing the length of the scale outside the table
(vii)	The geyser will consume 240 joules of energy per second, when connected to a supply of 220 V		
Q3	(i)	(a)	No
		(b)	No change in focal length
	(ii)	(a)	MCB- Miniature Circuit Breaker
		(b)	Live Wire
	(iii)	(a)	Point A- North Point B- South
		(b)	Flemings Left Hand Rule
	(iv)	(a)	B
		(b)	Both will show same rise in temperature
	(v)	Radioactivity will not change at all due to chemical change, because, in a chemical change an electron takes part and the nucleus remains unchanged.	

Section B			
Q4	(i)	(a)	38°
		(b)	Emergent Ray
	(ii)	(a)	
		(b)	
	(iii)	(a)	Velocity of blue is less than the velocity of orange in glass.
(iv)	No, since they deviate by different amounts they no longer remain parallel		
Q5	(i)	(a)	38°
		(b)	Emergent Ray
	(ii)	(a)	12 mm
		(b)	$\mu = 1 / \sin C$
	(iii)	(a)	As they are invisible
		(b)	Shows dispersion when enters and shows simple refraction when it emerges out
	(iv)	(a)	When light passes from one medium to another medium it bends. Since different colors of light have different wavelength, they bend at different angles

Q6	(i)	(b)	M.A. = 4
	(ii)	(a)	Part 0 to 50 cm will weigh more
		(b)	10 _{gf}
	(iii)	(a)	12000 J
		(b)	2400 W
Q7	(i)	(a)	Loudness
		(b)	21 km
	(ii)	(b)	Alpha
	(iii)	(a)	Resonance
		(b)	It is a phenomenon that occurs when the matching vibrations of another object increase the amplitude of an object's oscillations.
		(c)	Vibration of tuning fork
Q8	(i)	(a)	A material's specific resistance is an inherent property that is determined by its composition. However, the electrical resistance is an intrinsic property that is determined by the conductor's length and cross-section, as well as the applied potential difference. Ohm (. m) is the SI unit for specific resistance is ohm-meters (Ω m), whereas Ohm is the SI unit for electrical resistance.
		(b)	No change
		(c)	Constantan
	(ii)	(a)	Gamma
		(b)	Lead shield enclosure
		(c)	Carbon-14/Potassium-14
	(iii)	(a)	0.2 A

		(b)	3 V	
Q9	(i)	151200 Joules		
	(ii)	(a)	The principle of calorimetry indicates the law of conservation energy, i.e. the total heat lost by the hot body is equal to the total heat gained by the cold body.	
		(b)	Copper	
		(c)	It has low value of specific heat capacity	
	(iii)	(a)	A- Positive B- Negative	
		(b)	Magnetic field increases	
		(c)	1.	Change the direction of current
			2.	Decrease the current in the circuit by increasing the resistance