

Hunt for Junior CV Raman – 2022

CODE 22011

Class XI- ENGG SAMPLE QUESTION PAPER

PHYSICS

1.	Which relation is wrong?				
	(a) 1calorie= 4.18 joule	(b) $1A^0 = 10^{-10}$ m			
	(c) 1MeV=1.6x10 ⁻¹³ Joule	(d) 1 Newton=10 ⁻⁵ dyne			
2.	A 4kg mass and a 1kg mass are moving with the equal kinetic energies. The ratio of their				
	momentums is				
	(a) 1:2	(b) 1:1			
	(c) 2:1	(d) 4:1			

CHEMISTRY

3.	Which of the following is an example of super octet molecule?				
	a) ClF ₃	b) PCl ₅	c) IF ₇	d) All of these	
4.	Which of the following bonds have lowest bond energy?				
	a) C – C	b) N – N	c) H – H	d) O – O	

MATHEMATICS

5.	Which of the following is correct					
	a) $\sin 1^{\circ} > \sin 1$	b)	$\sin 1^{0} < \sin 1$			
	c) $\sin 1^0 = \sin 1$	d	$\sin 1^{\circ} < \sin 1$ $\sin 1^{\circ} = \frac{\pi}{180} \sin 1$			
6	The domain of $f(x) = \frac{\log_2(x+3)}{x^2+3x+2}$ is					
	a) $R - \{-1, -2\}$	$(-2,\infty)$	c) $R - \{-1, -2, -3\}$		d) $(-3,-\infty)$ – $\{-1,-2\}$	
7	Find the length of intercept, the circle $x^2 + y^2 + 10x - 6y + 9 = 0$ makes on the					
	x-axis?					
	a) 2	b) 14	c) 12	d) 8		

MENTAL ABILITY

8	How many independent words can 'DETERMINATION' be divided into without changing the order of				
	the letters and using each letters only once?				
	a) One	b) Two	c) Three	d) none of these	
9.	I am facing South. I turn right and walk 20 m. Then I turn Right again and walk 10 m. Then I turn left and walk 10 m and then turn right and walk 20 m. Then I turn right again and walk 60 m. In which direction am I from the starting point?				
	a) North	b) North-west	c) East	d) North-east	
10.	3265 : 4376 :: 4	4673:?			
	a) 2154	b) 3562	c) 5487	d) 5784	