

St. Lawrence High School

A Jesuit Christian Minority Institution



Term: 1st Work Sheet – 7

Class - XI Subject – Physics

Date -22.06.20

Chapter - Vector

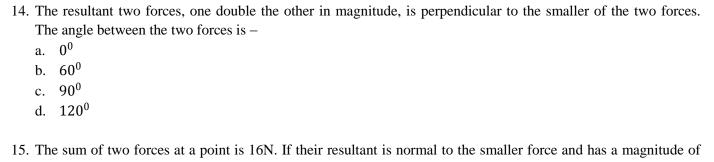
Topic -Vector Addition

Choose the correct option for the following questions.

 $1 \times 15 = 15$

- 1. Which one among the following is a vector quantity?
 - a. Electric current
 - b. Pressure
 - c. Area
 - d. All of the above
- 2. Vector \vec{A} and $3\vec{A}$ are
 - a. Parallel
 - b. Coplanar
 - c. Collinear
 - d. All of the above
- 3. If \vec{A} and \vec{B} are two vectors such that $|\vec{A} + \vec{B}| = |\vec{A} \vec{B}|$, then the angle between \vec{A} and \vec{B} is
 - a. 0^0
 - b. 60^0
 - c. 90^{0}
 - d. 120^0
- 4. The vector sum of two forces is perpendicular to their vector differences. In that case, the forces
 - a. Are not equal to each other in magnitude
 - b. Cannot be predicted
 - c. Are equal to each other
 - d. Are equal to each other in magnitude
- 5. Which one of the following is a scalar quantity?
 - a. Displacement
 - b. Acceleration
 - c. Force
 - d. Work
- 6. Which one of the following is a not a vector quantity?
 - a. Torque
 - b. Displacement
 - c. Velocity
 - d. Speed

a. b. c.	$\frac{\pi}{2}$
8. Ta. a. b. c. d.	Non-coplanar concurrent forces Coplanar concurrent forces
ve a. b. c.	iven that $\vec{P} + \vec{Q} + \vec{R} = \vec{0}$. Two out of the three vectors are equal in magnitude. The magnitude of the third vector is $\sqrt{2}$ times that of the other two. Which of the following can be angles between these vectors? $90^0, 135^0, 135^0$ $45^0, 45^0, 90^0$ $30^0, 60^0, 90^0$ $45^0, 90^0, 135^0$
a. b. c.	
a. b. c.	wo vectors of equal magnitude have a resultant equal to either of them, then the angle between them will be -30^{0} 120^{0} 60^{0} 45^{0}
sr a.	4N 2N
	120^{0} 60^{0}



- 8N, then their magnitudes be
 - a. 6N, 10N
 - b. 8N, 8N
 - c. 4N, 12N
 - d. 2N, 14N

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