

NAT I Engineering Physics

The sum of the magnitude of two forces acting at a point is 18 and the magnitude of their resultant is 12. If the resultant is at 90° with the force of the smaller magnitude then their magnitude are: A motorist travels A to B at a speed at 40 km/h and returns at speed of 60 km/h. His average speed will be: A motorist travels A to B at a speed at 40 km/h and returns at speed of 60 km/h. His average speed will be: A 4. 40 km/h A 5. 40 km/h C. 50 km/h A 7 arallel B. A 18 B. A 18 B. A 18 C. 6 D. 7 A Parallel B. Antiparallel C. At angle 60° D. None of the above is correct A 7 they are parallel vectors B. They are anti-parallel vectors C. None of the above is correct A 8 A 8 A 2ero B. AB C. A + B C. A + B C. A - B Two forces of 10N and 15N are acting simultaneously on an object in the same direction Their resultant is Two forces are acting together on an object. The magnitude of their resultant is minimum when the angle between the force is. A 10N B. 20N C. 100N C. 25N C. 26N C. 26N C. 26N C. 26N C. 100N C. 26N C. 100N C. 26N C. 26N C. 26N C. 26N C. 26N C. 100N C. 26N C. 100N C. 100N C. 26N C. 100N C. 100N	Sr	Questions	Answers Choice
A motorist travels A to B at a speed at 40 km/h and returns at speed of 60 km/h. His average speed will be: The velocity of a particle at an instant is 10 m/s and after 5 s the velocity of the particle is 20 m/s. The velocity 3s before in m/s is: To get a resultant displacement of 10 m, two displacement vectors of magnitude 6 m and 8 m should be combined To get a resultant displacement of 10 m, two displacement vectors of magnitude 6 m and 8 m should be combined A Parallel B. Antiparallel C. At angle 60° D. Perpendicular to each other The dot product of two vectors is negative when The dot product of two vectors is negative when They are parallel vectors B. They are anti-parallel vectors C. They are perpendicular vectors D. None of the above is correct B. A B. AB. C. A + B. D. A - B A In the same direction B. Opposite to each other C. Perpendicular to each other D. Zero Two forces of 10N and 15N are acting simultaneously on an object in the same direction. Two forces are acting together on an object. The magnitude of their resultant is minimum when the angle between the force is. A force of 10N is acting along y-axis its component along x-axis is A force of 10N is acting along y-axis its component along x-axis is	1	resultant is 12. If the resultant is at 90° with the force of the smaller magnitude then their	B. 4, 14 C. 5, 13
The velocity of a particle at an instant is 10 m/s and after 5 s the velocity of the particle is 20	2		B. 48 km/h C. 50 km/h
To get a resultant displacement of 10 m, two displacement vectors of magnitude 6 m and 8 b. Antiparallel C. At angle 60° D. Perpendicular to each other The dot product of two vectors is negative when C. They are parallel vectors B. They are anti-parallel vectors C. They are perpendicular vectors D. None of the above is correct If two non-zero vector A and B are parallel to each other, then A B is equal to C. A + B D. A - B If the dot product of two non-zero vectors vanishes the vectors will be C. A + B D. A - B Two forces of 10N and 15N are acting simultaneously on an object in the same direction. A Zero B. S. N C. 25N D. 150N Two forces are acting together on an object. The magnitude of their resultant is minimum when the angle between the force is. A force of 10N is acting along y-axis its component along x-axis is A 10N B. 20N C. 100N	3	The velocity of a particle at an instant is 10 m/s and after 5 s the velocity of the particle is 20 m/s. The velocity 3s before in m/s is:	B. 4 C. 6
The dot product of two vectors is negative when B. They are perpendicular vectors C. They are perpendicular vectors D. None of the above is correct A. Zero B. AB C. A + B D. A - B If two non-zero vector A and B are parallel to each other, then A B is equal to A. In the same direction B. Opposite to each other C. Perpendicular to each other D. Zero A. Zero B. A. In the same direction B. Opposite to each other C. Perpendicular to each other D. Zero A. Zero B. 5N C. 25N D. 150N Their resultant is Two forces are acting together on an object. The magnitude of their resultant is minimum when the angle between the force is. A force of 10N is acting along y-axis its component along x-axis is A force of 10N is acting along y-axis its component along x-axis is	4		B. Antiparallel C. At angle 60°
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7 If the dot product of two non-zero vectors vanishes the vectors will be 8. Opposite to each other C. Perpendicular to each other D. Zero 8 Two forces of 10N and 15N are acting simultaneously on an object in the same direction. Their resultant is 9 Two forces are acting together on an object. The magnitude of their resultant is minimum when the angle between the force is. 10 A force of 10N is acting along y-axis its component along x-axis is 11 A. 2ero B. 5N C. 25N D. 150N A. 0° B. 60° C. 120° D. 180° A. 10N B. 20N C. 100N	6	If two non-zero vector A and B are parallel to each other, then A, B is equal to	B. AB C. A + B
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Two forces are acting together on an object. The magnitude of their resultant is minimum when the angle between the force is. B. 60° C. 120° D. 180° A 10N B. 20N C. 100N	8		B. 5N C. 25N
10 A force of 10N is acting along y-axis its component along x-axis is B. 20N C. 100N	9		B. 60° C. 120°
	10	A force of 10N is acting along y-axis its component along x-axis is	B. 20N C. 100N