Unir 4 Turning Effects of Force

Sr. No.	Questions	A	B	C	D
1	A particle is simultaneously acted upon by two forces of 4 and 3 newtons. The net force on the particle is:	$1\ N$	between $1\ N$ and $7\ N$ ✓	$5\ N$	$7\ N$
2	A force F is making an angle of 60° with $x\text{-}axis$. Its $y\text{-}component$ is equal to:	F	$F \sin 60^\circ$ ✓	$F \cos 60^\circ$	$F \tan 60^\circ$
3	Moment of force is called:	moment arm	couple	couple arm	torque ✓
4	If F_1 and F_2, are the forces acting on a body and τ is the torque produced in it, the body will be completely in equilibrium, when:	$\sum F = 0$ and $\sum \tau = 0$ ✓	$\sum F = 0$ and $\sum \tau \neq 0$	$\sum F \neq 0$ and $\sum \tau =$	$\sum F \neq 0$ and $\sum \tau \neq 0$
5	A Shopkeeper sells his articles by a balance having unequal arms of the pans. If he puts the weights in the pan having shorter arm, then the customer:	loses ✓	gains	neither loses nor gains	not certain
6	A man walks on a tight rope. He balances himself by holding a bamboo stick horizontally. It is an application of:	law of conservation of momentum	Newton's second law of motion	principle of moments ✓	Newton's third law of motion
7	In stable equilibrium the centre of gravity of the body lies:	at the highest position	at the lowest position ✓	at any position	outside the body
8	The centre of mass of a body:	lies always inside the body	lies always outside the body	lies always on the surface of the body	may lie within, outside or on the surface ✓
9	A cylinder resting on its circular base is in:	stable equilibrium ✓	unstable equilibrium	neutral equilibrium	none of these
10	Centripetal force is given by:	rF	$rF \cos \theta$	$\frac{mv^2}{r}$ ✓	$\frac{mv}{r}$