Choose:

1)A body of mass 0.01 kg moves in a horizontal circular path of radius 150 cm. If the body makes one revolution in 3 s, the centripetal force is ....
(a) 0.066 N in a direction tangent to the circular path
(b) 6.585 N in a direction tangent to the circular path
(c) 0.066 N towards the centre of the circular path
(d) 6.585 N towards the centre of the circular path

2)If a body moves in a uniform circular path with constant tangential velocity of 2.2 m/s where it completes 6 revolutions in a minute, then the radius of the path equals………………….

 a) 3.5 m   b) 7 m   c) 10.5 m   d) 12 m

3)A pilot drives a jet with a velocity of 60 m/s in a uniform circular path of radius 190 m. if the centripetal force required to keep the jet in its circular path is 2 x 10^4 N , so the mass of the jet equals……………
a- 950.28 Kg   b- 1055.56 Kg
c- 1120.42 Kg   d- 1450.36 Kg

4) A body moves in a circular path of radius r with a speed (v) under the effect of a centripetal force (F) , if its velocity increases to $\sqrt{2}$ v and moves in the same circular path , then the centripetal force affecting it will be …………………………..
a- 2 F   b- $\sqrt{2}$F
c-$\frac{1}{\sqrt{2}}$ F   d-$\frac{1}{2}$ F

5) The centripetal force acting on a car that moves in a circular path is initiated from ....

a- the sum of the horizontal component of friction force and the vertical component of reaction force

b- the sum of the horizontal component of friction force and reaction force

c- the reaction force only

d- the friction force only

6) A body rotates in a circular path with a s peed of 10 m/s . if the moved distance during a half cycle is 44 m , so the periodic time of its circular motion is.........................

a- 22 sec   b- 8.8 sec

c- 4.4 sec   d- $\frac{22}{7}$ sec

7) A person tied a body by a robe and held the second end of the rope then he managed the body in a circular path , suddenly the rope is cut then the direction of motion of the body at this moment is ....

a- in a circular path but it has a longer diameter

b- towards the center of the circular path

c- outside the center of the circular path

d- in a tangent direction to the circular path

8)The centripetal acceleration arises from the change in the direction of velocity and the unit of measuring the centripetal acceleration is ....

a- $M^2 s^{-1}$ b- $M\ s^{-2}$

c- $M^2\ s^{-2}$ d- $M^{-2} s^{-1}$