PWT-2 (13-08-2023)
PHYSICS

1. (4) As the distances are same so, 

$v_{av} = \frac{2v_1v_2}{v_1 + v_2}$

2. (1) Time average speed $= \frac{v_1 + v_2}{2} = \frac{80+40}{2} = 60\text{km/hr}$.

3. (1) $\vec{r} = 20\hat{i} + 10\hat{j} \therefore r = \sqrt{20^2 + 10^2} = 22.5\,\text{m}$

4. (4)

5. (4)

6. (3)

7. (1)Magnitude of velocity = Speed; So, if the speed is zero then it must have zero velocity also.

8. (3) The second hand of the clock in minute covers an angle of 360^o and the initial and final positions are same. So,Displacement =0 

9. (4)

10. (2)