

1. A passenger travels along a straight line with velocity v_1 for first half time and with velocity v_2 for next half time, then the mean velocity v is given by
- (A) $v = \frac{v_1+v_2}{2}$ (B) $v = \sqrt{(v_1v_2)}$
 (C) $v = \sqrt{\left(\frac{v_2}{v_1}\right)}$ (D) $\frac{2}{v} = \frac{1}{v_1} + \frac{1}{v_2}$
2. Two cars of masses m_1 and m_2 are moving along the circular path of radius r_1 and r_2 . They take one round in the same time. The ratio of angular velocity of the two cars will be:
- (A) $m_1 : m_2$ (B) $r_1 : r_2$
 (C) $1 : 1$ (D) $m_1r_1 : m_2r_2$
3. A force of 5 newton acts on a body of weight 9.8 newton. What is the acceleration produced in s^{-2} ?
- (A) 49.00 (B) 5.00
 (C) 1.46 (D) 0.51
4. Calculate the mass of a body whose volume is $2 m^3$ and relative density is 0.52.
- (A) 104 (B) 1040
 (C) 1140 (D) 140
5. If the force applied at the two ends of a body are opposite in direction but are not equal in magnitude:
- (A) The body will not rotate
 (B) The body will move in forward direction
 (C) The body will not rotate only
 (D) The body rotates & moves in forward direction.
6. The value of $\frac{(25)^{5/2} \times (243)^{2/5}}{(16)^{3/4} \times (8)^{5/3}}$ is :-
- (A) $\frac{5625}{125}$ (B) $\frac{5615}{256}$
 (C) $\frac{5625}{256}$ (D) None
7. The value of $\left(\frac{x^a}{x^b}\right)^{1/ab} \cdot \left(\frac{x^b}{x^c}\right)^{1/bc} \cdot \left(\frac{x^c}{x^a}\right)^{1/ca}$ is:
- (A) 1 (B) 0
 (C) $x^{1/abc}$ (D) $x^{1/(ab+bc+ca)}$
8. The factor of $(216x^3 - 64y^3)$ are:-
- (A) $8(3x-2y)(9x^2+4y^2-6xy)$
 (B) $8(3x-2y)(9x^2-4y^2-6xy)$
 (C) $8(3x-2y)(9x^2+4y^2)$
 (D) $8(3x-2y)(9x^2+4y^2+6xy)$
9. Which of the following statements are incorrect?
- (A) The symbol of magnesium is Mn
 (B) The symbol of cobalt is Cu
 (C) The symbol of calcium is Co
 (D) None of these
10. 'Goitre' is related to 'Iodine' as 'Anaemia' is related to-
- (A) Vitamin (B) Blood
 (C) Iron (D) Weakness
11. 'Fluid mosaic model' of plasma membrane was given by -
- (A) Robertson
 (B) Gorter and Grendel
 (C) Singer and Nicolson
 (D) Danielli and Davson
12. Polymorphic cell organelle is -
- (A) Lysosome (B) Ribosome
 (C) Centrosome (D) Chromosome

Answers	
Question	Answer
1	A
2	C
3	B
4	B
5	D
6	D
7	A
8	D
9	A, B, C
10	C
11	C
12	A

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