

250 Mechanics Multiple Choice Questions

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This document contains 250 Mechanics MCQs with four options, correct answer, and concise explanations.

Q1. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q2. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q3. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q4. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q5. A car accelerates from rest at 2 m/s². What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q6. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q7. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q8. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s^2
- B) 5 m/s^2
- C) 10 m/s^2
- D) 20 m/s^2

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q9. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q10. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q11. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q12. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q13. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s^2
- B) 5 m/s^2
- C) 10 m/s^2
- D) 20 m/s^2

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q14. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: Work = $F \cdot d = 10 \times 5 = 50 \text{ J}$.

Q15. Impulse is equal to:

- A) Change in velocity

- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q16. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q17. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: Work = $F \cdot d = 10 \cdot 5 = 50 \text{ J}$.

Q18. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2} m v^2 = \frac{1}{2} \cdot 2 \cdot 9 = 9 \text{ J}$.

Q19. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: Work = $F \cdot d = 10 \cdot 5 = 50 \text{ J}$.

Q20. A car accelerates from rest at 2 m/s². What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \cdot 5 = 10 \text{ m/s}$.

Q21. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q22. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J

- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q23. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q24. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q25. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q26. A car accelerates from rest at 2 m/s². What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q27. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q28. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q29. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum

D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q30. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

A) 9 J

B) 6 J

C) 3 J

D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q31. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

A) 2 m/s²

B) 5 m/s²

C) 10 m/s²

D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q32. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

A) 2 m/s²

B) 5 m/s²

C) 10 m/s²

D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q33. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

A) 2 m/s²

B) 5 m/s²

C) 10 m/s²

D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q34. Work done when a force of 10 N moves an object 5 m in direction of force?

A) 15 J

B) 50 J

C) 5 J

D) 10 J

Correct Answer: B

Explanation: $Work = F \cdot d = 10 \times 5 = 50 \text{ J}$.

Q35. Impulse is equal to:

A) Change in velocity

B) Force $\times$ Time

C) Momentum

D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q36. A car accelerates from rest at 2 m/s². What is its velocity after 5 s?

A) 5 m/s

B) 10 m/s

C) 15 m/s

D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q37. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s^2
- B) 5 m/s^2
- C) 10 m/s^2
- D) 20 m/s^2

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q38. A car accelerates from rest at 2 m/s^2 . What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q39. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q40. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q41. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q42. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q43. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \cdot 2 \cdot 9 = 9 \text{ J}$.

Q44. A car accelerates from rest at 2 m/s^2 . What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \cdot 5 = 10 \text{ m/s}$.

Q45. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s^2
- B) 5 m/s^2
- C) 10 m/s^2
- D) 20 m/s^2

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q46. A car accelerates from rest at 2 m/s^2 . What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \cdot 5 = 10 \text{ m/s}$.

Q47. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s^2
- B) 5 m/s^2
- C) 10 m/s^2
- D) 20 m/s^2

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q48. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s^2
- B) 5 m/s^2
- C) 10 m/s^2
- D) 20 m/s^2

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q49. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: $\text{Work} = F \cdot d = 10 \cdot 5 = 50 \text{ J}$.

Q50. A car accelerates from rest at 2 m/s^2 . What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \cdot 5 = 10 \text{ m/s}$.

Q51. A car accelerates from rest at 2 m/s^2 . What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q52. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q53. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q54. A car accelerates from rest at 2 m/s^2 . What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q55. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q56. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q57. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q58. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q59. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q60. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q61. A car accelerates from rest at 2 m/s^2 . What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q62. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s^2
- B) 5 m/s^2
- C) 10 m/s^2
- D) 20 m/s^2

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q63. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s^2
- B) 5 m/s^2
- C) 10 m/s^2
- D) 20 m/s^2

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q64. A car accelerates from rest at 2 m/s^2 . What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q65. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J

- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: $\text{Work} = F \cdot d = 10 \cdot 5 = 50 \text{ J}$.

Q66. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: $\text{Work} = F \cdot d = 10 \cdot 5 = 50 \text{ J}$.

Q67. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q68. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q69. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: $\text{Work} = F \cdot d = 10 \cdot 5 = 50 \text{ J}$.

Q70. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: $\text{Impulse} = \text{Force} \times \text{time interval}$.

Q71. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: $\text{Impulse} = \text{Force} \times \text{time interval}$.

Q72. A car accelerates from rest at 2 m/s². What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s

C) 15 m/s

D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q73. Work done when a force of 10 N moves an object 5 m in direction of force?

A) 15 J

B) 50 J

C) 5 J

D) 10 J

Correct Answer: B

Explanation: $\text{Work} = F \times d = 10 \times 5 = 50 \text{ J}$.

Q74. Work done when a force of 10 N moves an object 5 m in direction of force?

A) 15 J

B) 50 J

C) 5 J

D) 10 J

Correct Answer: B

Explanation: $\text{Work} = F \times d = 10 \times 5 = 50 \text{ J}$.

Q75. Work done when a force of 10 N moves an object 5 m in direction of force?

A) 15 J

B) 50 J

C) 5 J

D) 10 J

Correct Answer: B

Explanation: $\text{Work} = F \times d = 10 \times 5 = 50 \text{ J}$.

Q76. A car accelerates from rest at 2 m/s^2 . What is its velocity after 5 s?

A) 5 m/s

B) 10 m/s

C) 15 m/s

D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q77. Impulse is equal to:

A) Change in velocity

B) Force $\times$ Time

C) Momentum

D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: $\text{Impulse} = \text{Force} \times \text{time interval}$.

Q78. Impulse is equal to:

A) Change in velocity

B) Force $\times$ Time

C) Momentum

D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: $\text{Impulse} = \text{Force} \times \text{time interval}$.

Q79. A car accelerates from rest at 2 m/s^2 . What is its velocity after 5 s?

A) 5 m/s

B) 10 m/s

C) 15 m/s

D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q80. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

A) 2 m/s²

B) 5 m/s²

C) 10 m/s²

D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q81. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

A) 9 J

B) 6 J

C) 3 J

D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q82. A car accelerates from rest at 2 m/s². What is its velocity after 5 s?

A) 5 m/s

B) 10 m/s

C) 15 m/s

D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q83. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

A) 2 m/s²

B) 5 m/s²

C) 10 m/s²

D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q84. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

A) 9 J

B) 6 J

C) 3 J

D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q85. Work done when a force of 10 N moves an object 5 m in direction of force?

A) 15 J

B) 50 J

C) 5 J

D) 10 J

Correct Answer: B

Explanation: $\text{Work} = F \times d = 10 \times 5 = 50 \text{ J}$.

Q86. Impulse is equal to:

A) Change in velocity

B) Force $\times$ Time

C) Momentum

D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q87. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q88. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: Work = $F \cdot d = 10 \cdot 5 = 50 \text{ J}$.

Q89. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: Work = $F \cdot d = 10 \cdot 5 = 50 \text{ J}$.

Q90. A car accelerates from rest at 2 m/s². What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \cdot 5 = 10 \text{ m/s}$.

Q91. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q92. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: Work = $F \cdot d = 10 \cdot 5 = 50 \text{ J}$.

Q93. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q94. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q95. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: $Work = F \cdot d = 10 \times 5 = 50 \text{ J}$.

Q96. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q97. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s^2
- B) 5 m/s^2
- C) 10 m/s^2
- D) 20 m/s^2

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q98. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: $Work = F \cdot d = 10 \times 5 = 50 \text{ J}$.

Q99. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q100. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s^2
- B) 5 m/s^2
- C) 10 m/s^2
- D) 20 m/s^2

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q101. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q102. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q103. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q104. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q105. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q106. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q107. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q108. A car accelerates from rest at 2 m/s². What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q109. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q110. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q111. A car accelerates from rest at 2 m/s². What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q112. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q113. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: $\text{Work} = F \cdot d = 10 \times 5 = 50 \text{ J}$.

Q114. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: $\text{Work} = F \cdot d = 10 \times 5 = 50 \text{ J}$.

Q115. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J

- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q116. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: $Work = F \cdot d = 10 \times 5 = 50 \text{ J}$.

Q117. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q118. A car accelerates from rest at 2 m/s². What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q119. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: $\text{Impulse} = \text{Force} \times \text{time interval}$.

Q120. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q121. A car accelerates from rest at 2 m/s². What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q122. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time

- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q123. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: Work = $F \cdot d = 10 \cdot 5 = 50$ J.

Q124. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5$ m/s².

Q125. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \cdot 2 \cdot 9 = 9$ J.

Q126. A car accelerates from rest at 2 m/s². What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \cdot 5 = 10$ m/s.

Q127. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q128. A car accelerates from rest at 2 m/s². What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \cdot 5 = 10$ m/s.

Q129. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J

D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q130. A car accelerates from rest at 2 m/s^2 . What is its velocity after 5 s?

A) 5 m/s

B) 10 m/s

C) 15 m/s

D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q131. A car accelerates from rest at 2 m/s^2 . What is its velocity after 5 s?

A) 5 m/s

B) 10 m/s

C) 15 m/s

D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q132. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

A) 9 J

B) 6 J

C) 3 J

D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q133. A car accelerates from rest at 2 m/s^2 . What is its velocity after 5 s?

A) 5 m/s

B) 10 m/s

C) 15 m/s

D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q134. A car accelerates from rest at 2 m/s^2 . What is its velocity after 5 s?

A) 5 m/s

B) 10 m/s

C) 15 m/s

D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q135. Impulse is equal to:

A) Change in velocity

B) Force $\times$ Time

C) Momentum

D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q136. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

A) 2 m/s^2

B) 5 m/s^2

C) 10 m/s^2

D) 20 m/s^2

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q137. A car accelerates from rest at 2 m/s^2 . What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q138. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q139. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q140. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q141. A car accelerates from rest at 2 m/s^2 . What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q142. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: Work = $F \times d = 10 \times 5 = 50 \text{ J}$.

Q143. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s^2
- B) 5 m/s^2
- C) 10 m/s^2
- D) 20 m/s^2

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q144. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q145. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: Work = $F \cdot d = 10 \cdot 5 = 50 \text{ J}$.

Q146. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q147. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2} m v^2 = \frac{1}{2} \cdot 2 \cdot 9 = 9 \text{ J}$.

Q148. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2} m v^2 = \frac{1}{2} \cdot 2 \cdot 9 = 9 \text{ J}$.

Q149. A car accelerates from rest at 2 m/s^2 . What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \cdot 5 = 10 \text{ m/s}$.

Q150. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: Work = $F \cdot d = 10 \cdot 5 = 50 \text{ J}$.

Q151. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q152. A car accelerates from rest at 2 m/s². What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q153. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q154. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q155. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: Work = $F \times d = 10 \times 5 = 50 \text{ J}$.

Q156. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q157. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q158. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q159. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q160. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q161. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q162. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q163. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q164. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: Work = $F \cdot d = 10 \times 5 = 50 \text{ J}$.

Q165. A car accelerates from rest at 2 m/s². What is its velocity after 5 s?

- A) 5 m/s

- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q166. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q167. A car accelerates from rest at 2 m/s². What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q168. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q169. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q170. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q171. A car accelerates from rest at 2 m/s². What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q172. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²

C) 10 m/s²

D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q173. A car accelerates from rest at 2 m/s². What is its velocity after 5 s?

A) 5 m/s

B) 10 m/s

C) 15 m/s

D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q174. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

A) 9 J

B) 6 J

C) 3 J

D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q175. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

A) 9 J

B) 6 J

C) 3 J

D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q176. Impulse is equal to:

A) Change in velocity

B) Force $\times$ Time

C) Momentum

D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q177. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

A) 9 J

B) 6 J

C) 3 J

D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q178. Work done when a force of 10 N moves an object 5 m in direction of force?

A) 15 J

B) 50 J

C) 5 J

D) 10 J

Correct Answer: B

Explanation: Work = $F \times d = 10 \times 5 = 50 \text{ J}$.

Q179. Impulse is equal to:

A) Change in velocity

B) Force $\times$ Time

C) Momentum

D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q180. Work done when a force of 10 N moves an object 5 m in direction of force?

A) 15 J

B) 50 J

C) 5 J

D) 10 J

Correct Answer: B

Explanation: Work = $F \cdot d = 10 \cdot 5 = 50$ J.

Q181. Work done when a force of 10 N moves an object 5 m in direction of force?

A) 15 J

B) 50 J

C) 5 J

D) 10 J

Correct Answer: B

Explanation: Work = $F \cdot d = 10 \cdot 5 = 50$ J.

Q182. Work done when a force of 10 N moves an object 5 m in direction of force?

A) 15 J

B) 50 J

C) 5 J

D) 10 J

Correct Answer: B

Explanation: Work = $F \cdot d = 10 \cdot 5 = 50$ J.

Q183. Impulse is equal to:

A) Change in velocity

B) Force $\times$ Time

C) Momentum

D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q184. A car accelerates from rest at 2 m/s². What is its velocity after 5 s?

A) 5 m/s

B) 10 m/s

C) 15 m/s

D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \cdot 5 = 10$ m/s.

Q185. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

A) 2 m/s²

B) 5 m/s²

C) 10 m/s²

D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5$ m/s².

Q186. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

A) 2 m/s²

B) 5 m/s²

C) 10 m/s²

D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q187. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: $\text{Work} = F \cdot d = 10 \cdot 5 = 50 \text{ J}$.

Q188. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: $\text{Work} = F \cdot d = 10 \cdot 5 = 50 \text{ J}$.

Q189. A car accelerates from rest at 2 m/s^2 . What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \cdot 5 = 10 \text{ m/s}$.

Q190. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s^2
- B) 5 m/s^2
- C) 10 m/s^2
- D) 20 m/s^2

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q191. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: $\text{Impulse} = \text{Force} \times \text{time interval}$.

Q192. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: $\text{Work} = F \cdot d = 10 \cdot 5 = 50 \text{ J}$.

Q193. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s^2
- B) 5 m/s^2
- C) 10 m/s^2
- D) 20 m/s^2

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q194. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q195. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s^2
- B) 5 m/s^2
- C) 10 m/s^2
- D) 20 m/s^2

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q196. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q197. A car accelerates from rest at 2 m/s^2 . What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q198. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s^2
- B) 5 m/s^2
- C) 10 m/s^2
- D) 20 m/s^2

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q199. A car accelerates from rest at 2 m/s^2 . What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q200. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q201. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q202. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q203. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q204. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: $Work = F \cdot d = 10 \times 5 = 50 \text{ J}$.

Q205. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q206. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: $Impulse = Force \times \text{time interval}$.

Q207. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q208. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q209. A car accelerates from rest at 2 m/s². What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q210. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q211. A car accelerates from rest at 2 m/s². What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q212. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: $\text{Work} = F \times d = 10 \times 5 = 50 \text{ J}$.

Q213. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: $\text{Work} = F \times d = 10 \times 5 = 50 \text{ J}$.

Q214. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q215. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²

- B) 5 m/s^2
- C) 10 m/s^2
- D) 20 m/s^2

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q216. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q217. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s^2
- B) 5 m/s^2
- C) 10 m/s^2
- D) 20 m/s^2

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q218. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: Work = $F \cdot d = 10 \cdot 5 = 50 \text{ J}$.

Q219. A car accelerates from rest at 2 m/s^2 . What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \cdot 5 = 10 \text{ m/s}$.

Q220. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s^2
- B) 5 m/s^2
- C) 10 m/s^2
- D) 20 m/s^2

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q221. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q222. A car accelerates from rest at 2 m/s^2 . What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s

- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q223. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q224. A car accelerates from rest at 2 m/s². What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \times 5 = 10 \text{ m/s}$.

Q225. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: $Work = F \times d = 10 \times 5 = 50 \text{ J}$.

Q226. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: $Work = F \times d = 10 \times 5 = 50 \text{ J}$.

Q227. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s²
- B) 5 m/s²
- C) 10 m/s²
- D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q228. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: $Work = F \times d = 10 \times 5 = 50 \text{ J}$.

Q229. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J

D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q230. Impulse is equal to:

A) Change in velocity

B) Force $\times$ Time

C) Momentum

D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q231. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

A) 2 m/s²

B) 5 m/s²

C) 10 m/s²

D) 20 m/s²

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q232. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

A) 9 J

B) 6 J

C) 3 J

D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q233. Work done when a force of 10 N moves an object 5 m in direction of force?

A) 15 J

B) 50 J

C) 5 J

D) 10 J

Correct Answer: B

Explanation: Work = $F \cdot d = 10 \times 5 = 50 \text{ J}$.

Q234. Work done when a force of 10 N moves an object 5 m in direction of force?

A) 15 J

B) 50 J

C) 5 J

D) 10 J

Correct Answer: B

Explanation: Work = $F \cdot d = 10 \times 5 = 50 \text{ J}$.

Q235. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

A) 9 J

B) 6 J

C) 3 J

D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q236. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

A) 9 J

B) 6 J

C) 3 J

D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q237. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: $Work = F \cdot d = 10 \times 5 = 50 \text{ J}$.

Q238. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: $Work = F \cdot d = 10 \times 5 = 50 \text{ J}$.

Q239. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: $Work = F \cdot d = 10 \times 5 = 50 \text{ J}$.

Q240. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q241. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2}mv^2 = \frac{1}{2} \times 2 \times 9 = 9 \text{ J}$.

Q242. If a force of 10 N acts on a body of mass 2 kg, acceleration is?

- A) 2 m/s^2
- B) 5 m/s^2
- C) 10 m/s^2
- D) 20 m/s^2

Correct Answer: B

Explanation: $F = ma \Rightarrow a = F/m = 10/2 = 5 \text{ m/s}^2$.

Q243. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: $Work = F \cdot d = 10 \cdot 5 = 50 \text{ J}$.

Q244. A car accelerates from rest at 2 m/s^2 . What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \cdot 5 = 10 \text{ m/s}$.

Q245. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2} m v^2 = \frac{1}{2} \cdot 2 \cdot 9 = 9 \text{ J}$.

Q246. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q247. A body of mass 2 kg moving with velocity 3 m/s. Its kinetic energy?

- A) 9 J
- B) 6 J
- C) 3 J
- D) 12 J

Correct Answer: A

Explanation: $KE = \frac{1}{2} m v^2 = \frac{1}{2} \cdot 2 \cdot 9 = 9 \text{ J}$.

Q248. Impulse is equal to:

- A) Change in velocity
- B) Force $\times$ Time
- C) Momentum
- D) Mass $\times$ Acceleration

Correct Answer: B

Explanation: Impulse = Force $\times$ time interval.

Q249. A car accelerates from rest at 2 m/s^2 . What is its velocity after 5 s?

- A) 5 m/s
- B) 10 m/s
- C) 15 m/s
- D) 20 m/s

Correct Answer: B

Explanation: $v = u + at = 0 + 2 \cdot 5 = 10 \text{ m/s}$.

Q250. Work done when a force of 10 N moves an object 5 m in direction of force?

- A) 15 J
- B) 50 J
- C) 5 J
- D) 10 J

Correct Answer: B

Explanation: $Work = F \cdot d = 10 \cdot 5 = 50 \text{ J}$.

