TOPIC- MOTION AND TIME (CHAPTER -13)

| Q.N. | Folder <br>  <br> Question <br> Code | Topic | Question with Answer Options | Image | (If Any) | Correct <br> Answer <br> (Option- <br> A,B,C,D) |
| :--- | :---: | :---: | :---: | :--- | :--- | :--- |



| 2. | 3_15 <br> Science $3578$ | Motion and Time (CHAPTER 13) | The unit used to measure distance is metres ( m ). The unit used to measure time is seconds (s). Speed = Distance / Time. Hence the unit used to measure speed is $\mathrm{m} / \mathrm{s}$. <br> Now, momentum $=$ mass $x$ velocity . <br> Velocity has the same unit as that of speed. What would be the unit of momentum? |  |  | A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Answer Options |  |  |  |  |
|  |  | Option A | A Option B | Option C | Option D |  |
|  |  | kg m/s | $\mathrm{kg} \mathrm{m} / \mathrm{s}^{2}$ | $\mathrm{m} / \mathrm{s}^{2}$ | s/kg m |  |


| 3. | $3 \_15$ <br> Science | Motion and <br> Time <br> (CHAPTER 13) | Which of the following is true for the <br> egg beater / lassi maker shown in the <br> picture? |  |
| :---: | :---: | :---: | :--- | :--- |


| $\square$ |  | Answe | ptions |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Option A | Option B | Option C | Option D |
|  | A lever is used to increase the force applied. | An inclined plane is used to reduce the force required. | A gear is used to change the direction of rotation. | A pulley is used to change the direction of force. |



| 5. | 1_3 <br> Science <br> 6675 | MOTION \& I am sitt <br> TIME speed of <br> If a train <br> (CHAPTER 13) <br> direction <br> would it  | I am sitting in a train that is moving at a speed of 60 kilometres per hour (kmph). If a train now passes in the opposite direction at a speed of 80 kmph , what would its speed APPEAR to be to me? |  | D |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Answer 0ptions |  |  |  |
|  |  | Option A | Option B | Option C | Option D |
|  |  | 20 kmph in the direction of my train. | 20 kmph in the direction opposite to my train. | 140 kmph in the direction of my train. | 140 kmph in the direction opposite to my train. |


| 6. | $2 \_9$ |  <br> TIME <br> Science <br> (CHAPTER 13) | Identify the picture which <br> shows the correct path of the <br> striker on the carrom board |  |
| :--- | :--- | :--- | :--- | :--- | :--- |


|  |  | Options |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Option A | Option B | Option C | Option D |
|  |  |  | c. | D. |


| 7. | 1_3 <br> Science <br> 7351 | MOTION \& TIME Ayesha is <br> looking o <br> (CHAPTER 13) on an ad <br> direction <br> Which of  | Ayesha is travelling in a train. As she is looking out of the window, another train on an adjacent track moving in the same direction overtakes her train. <br> Which of the following is TRUE? |  | B |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | swer Options |  |  |
|  |  | Option A | Option B | Option C | Option D |
|  |  | To Ayesha, the other train will appear to be travelling FASTER than it actually is. | To Ayesha, the other train will appear to be travelling SLOWER than it actually is. | To Ayesha, the other train will appear to be travelling AT THE SAME SPEED as it actually is. | To Ayesha, the other train will appear to be travelling in the opposite direction. |


| 8. | 4_23 <br> Science $9047$ | Motion \& Time (CHAPTER 13) | In a comp a boy th the $b$ | nt of a moving train up a ball. Where is ST likely to fall? |  |  | A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Answer Options |  |  |  |  |  |
|  |  | Option A |  | Option B | Option C | Option D |  |
|  |  | into the boy's own hands |  | ahead of the boy | behind the boy | (it depends on the direction of motion of the train) |  |


| 9. | 4_23 <br> Science $9051$ | Motion \& Time (CHAPTER 13) | Many printing presses use rollers, which are long cylinders often made of rubber, to transfer inks. Rollers are usually friction driven by a drive roller. In the figure given, which roller(s) will turn in the same direction as the drive roller? |  | B |
| :---: | :---: | :---: | :---: | :---: | :---: |


|  | Answer Options |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Option A | Option B | Option C | Option D |
|  | Only R1 | R2 and R5 | R3 and R4 | R4 and R5 |


| 10. | $\begin{gathered} \hline 4 \_23 \\ \text { Science } \\ 9052 \end{gathered}$ | Motion \& Time (CHAPTER 13) | If a cricket pitch were made vertical, it would approximately be as tall as a building with how many storeys? |  |  | B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Answer Options |  |  |  |  |
|  |  | Option A | Option B | Option C | Option D |  |
|  |  | one | four | ten | thirty |  |



|  | Answer Options |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Option A | Option B | Option C | Option D |
|  | North | East | West |  |



| 13. | 1_3 <br> Science <br> 6677 |  <br> TIME <br> (CHAPTER 13) | The unit of distance is metres (m). Speed is the rate of change of distance. Its unit is metres / second $(\mathrm{m} / \mathrm{s})$. Which one of these could be a unit of rate of change of speed? |  |  | C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Answer Options |  |  |  |
|  |  | Option A | Option B | Option C | Option D |  |
|  |  | m. | $\mathrm{m} / \mathrm{s}$. | $\mathrm{m} / \mathrm{s}^{2}$ | Kmph |  |


| 14. | 2_10 <br> Science <br> 4173 | MOTION \& TIME <br> (CHAPTER 13) | Sanjana is lying down on the top berth of a train compartment. The train is travelling at a constant speed. Sanjana now drops a ball from the top berth. Where will the ball fall, compared to where it would have fallen if the train were not moving? |  |  |  | A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Answer Options |  |  |  |  |  |
|  |  | Option A |  | Option B | Option C | Option D |  |
|  |  | Exactly at the same position. |  | A little ahead of that position in the direction of the train's motion. | A little behind that position with respect to the direction of the train's motion. | It is not possible to specify - it may fall at A, B or C above. |  |


| 15. | 2_10 <br> Science $4179$ | MOTION \& TIME <br> (CHAPTER 13) | In the arrangement shown the toothed wheel P is making 10 turns per minute in a clock wise direction. What can be said about wheel S? (The connecting rods can only rotate.) |  |  |  |  | B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Answer Options |  |  |  |  |  |  |
|  |  | Option A |  | Option B |  | Option C | Option D |  |
|  |  | It will turn at the same speed in clockwise direction. |  | It will turn at a lower speed in clockwise direction. |  | It will turn at a faster speed in clockwise direction. | It will not turn at all in any direction. |  |

