## DPP - 3 (NLM)

## Video Solution on Website:-

Video Solution on YouTube:-

## Written Solutionon Website:-

## https://physicsaholics.com/home/courseDetails/53

## https://youtu.be/1pkjtZ51aRI

https://physicsaholics.com/note/notesDetalis/75

Q 1. A boy sitting on the top most berth in the compartment of a train which is just going to stop on a railway station, drops an apple aiming at the open hand of his brother situated vertically below his hands at a distance of about 2 m . The apple will fall -
(a) in the hand of his brother
(b) Slightly away from the hands of his brother in the direction of motion of the train
(c) Slightly away from the hands of his brother in the direction opposite to the direction of motion of the train
(d) none of the above

## Q 2. STATEMENT-1

A cloth covers a table. Some dishes are kept on it. The cloth can be pulled out without dislodging the dishes from the table.

## STATEMENT-2

For every action there is an equal and opposite reaction.
(a) Statement-1 is True, Statement-2 is True; Statement-2 is a correct explanation for Statement-1
(b) Statement-1 is True, Statement-2 is True; Statement-2 is not a correct explanation for Statement-1
(c) Statement-1 is True, Statement-2 is False
(d) Statement-1 is True, Statement-2 is True

Q 3. A block is resting on ground. Two forces normal by ground and its weight acting on it.
(A) Are weight \& normal by ground equal in magnitude and opposite in direction?
(B) Are weight \& normal by ground action-reaction pair?
(a) Yes
(b) No
(a) Can a sailing boat be propelled by air blown at the sails from a fan attached to the boat?
yes
(b) no

Q 5. Two identical blocks are hanging with the help of two identical strings as shown in figure. Lower block is strongly hitted by a hammer. Which string is likely to break first ?

(a) lower

(b) upper

Q 6. In a south Indian movie scene hero punches in the stomach of a villain due to which villain flies off and falls 200 meter away. Is it practically possible?
(a) yes
(b) no

Q 7. When a bullet hits a glass window, it makes a small hole in window .when a stone hits a glass window ,it may break the window but cant make hole in it. Why?

Q 8. Which of the following statement(s) is/are true
(a) Action and reaction forces always acts in just opposite direction
(b) Action and reaction must belong to same fundamental force
(c) Action and reaction may act on same particle
(d) None of these

Q 9. If action and reaction are equal and opposite to each other then how can a man move a box on a floor?

## Answer Key

| Q. 1 | b | Q. 2 | b | Q.3 a,b | Q. 4 | b | Q. 5 | a |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Q. 6 | b | Q. 7 |  | Q. 8 | a,b | Q. 9 |  |  |  |

