

BCM SCHOOL BASANT AVENUE DUGRI LUDHIANA Class VIII Science. Assignment

Answer Key

Section A – MCQs

1. b) Balanced diet, exercise and adequate sleep
2. b) Regular physical activity and talking to a trusted person
3. c) Shape and/or state of motion of an object

Section B – Assertion & Reason

4. A. Both Assertion and Reason are true, and Reason is the correct explanation of Assertion.

Explanation: Friction between the tyres and road opposes the motion of the bicycle, causing it to slow down.

5. C. Assertion is true, but Reason is false.

Explanation: Gravitational force is a non-contact force and acts even when objects are not touching.

Section C – Very Short Answer Questions

6. Riya's two unhealthy habits are:

Skipping breakfast.

Sleeping late and using the mobile phone for several hours.

Changes she should make:

Eat a healthy and balanced breakfast regularly.

Sleep on time and reduce screen time, especially before sleeping.

7. The routine of the second student is healthier because:

Short breaks prevent mental and physical tiredness and improve concentration.

Sufficient sleep and physical activity keep the body and mind healthy.

8. This situation shows that emotional and mental wellness involves recognising and managing stress in a healthy way rather than avoiding challenges.

Two healthy ways of managing stress are:

Practising deep breathing or relaxation exercises.

Talking to a trusted teacher, parent or friend.

8. The box initially remained at rest because the applied force was not enough to overcome the frictional force opposing its motion. When the boy pushed harder, the applied force became greater than friction, so the box started moving.

9. Frictional force is mainly responsible for slowing and stopping the bicycle.

It is both helpful and harmful:

Helpful: Friction between brake pads and the wheel helps us stop a bicycle safely.

Harmful: Friction between moving parts can cause wear and tear.

Section D – Case Study

10(a). Eating a variety of foods provides different nutrients such as carbohydrates, proteins, fats, vitamins, minerals and fibre, which are needed for proper growth and good health.

10(b) Regular physical activity keeps the body fit and active, strengthens muscles and bones, improves stamina and helps reduce stress.

10(c). Adequate sleep helps the body and brain rest and recover. It improves concentration, memory, energy and overall mental and physical health.

10(d). Aarav should follow a planned study timetable with short breaks and get adequate sleep instead of studying late into the night. He can also practise deep breathing or relaxation exercises to reduce anxiety.