



SATISH CHANDRA MEMORIAL SCHOOL
PRACTICE TEST-AUGUST, 2025
STD-VIII
HIGH ORDER THINKING SKILL QUESTIONS

Q 1. (Discount and Successive Discount)

4 marks

A mobile phone is listed on an Indian e-commerce site for ₹15,000. During the Independence Day sale, it is offered at a 15% discount followed by an additional 10% discount on the reduced price.

- (a) Find the final price after both discounts.
- (b) How much total discount (in ₹) did the buyer receive?
- (c) If the GST on mobiles is 18%, calculate the final bill amount.
- (d) What advantage does the customer get through successive discounts?

Q 2. (Square Roots in Real-life – Road Construction)

4 marks

A road construction team in Gujarat wants to build a **square-shaped park** on a plot of land measuring **2,025 square metres**.

- (a) What will be the length of one side of the park?
- (b) They plan to place lamp posts every 3 metres along the boundary. How many lamp posts will be needed?
- (c) If each lamp post costs ₹850, find the total cost of all lamp posts.

Q 3. (Road Construction – Labour and Time Relationship)

4 marks

A government road project in Bihar employs 20 workers and completes a section in 15 days.

- (a) If the project deadline is reduced to 10 days, how many more workers should be added to complete the work on time?
- (b) Is this an example of direct or inverse proportion?
- (c) Why is understanding this concept important in managing real-life projects?

Q 4. (Volume Comparison – Cubes in Agriculture)

4 marks

A farmer in Punjab stores grain in **cubical storage bins**. One bin has a volume of **2,197 m³**.

- (a) What is the side length of the bin?
- (b) If the farmer wants to build a new bin with **twice the volume**, will the side length also double? Explain mathematically.
- (c) How does this question demonstrate the non-linear relationship in cube and cube root operations?