

(A) Case Study: Meena's School Bag Purchase

Meena studies in a CBSE school in Delhi. Before the new academic session, her parents took her to a local market to buy a new school bag.

At Shop A, the marked price of a school bag was ₹1,200. The shopkeeper offered a 25% discount on the marked price.

At Shop B, the marked price of a similar school bag was ₹1,000. The shopkeeper offered a 10% discount and then charged an additional 5% GST on the discounted price.

Meena wants to compare the final prices at both shops to decide from where she should buy the bag.

**Questions**

- Q1.** Find the selling price of the school bag at Shop A after giving the discount. 1.5
- Q2.** Calculate the selling price of the school bag at Shop B after discount and GST. 1.5
- Q3.** Which shop offers the school bag at a lower price? By how much is it cheaper? 2
- Q4.** If Shop A also charges 5% GST on its discounted price, will Shop A still be cheaper than Shop B? Support your answer with calculations. 2

(B) Case Study: School Garden in Kerala

A CBSE school in Kerala decided to develop a rectangular herbal garden inside the school campus to promote environmental awareness among students.

- The length of the garden is 30 m and the breadth is 20 m.
- A path of uniform width is constructed inside the garden along its boundary.
- The width of the path is 2 m.

The remaining inner portion is used for planting medicinal herbs like tulsi, neem, and aloe vera.

Questions

Q1. Find the perimeter of the outer boundary of the garden. 1.5

Q2. Calculate the area of the entire garden. 1.5

Q3. Find the area of the path constructed inside the garden. 2

Q4. If fencing is to be done only around the inner herbal area, calculate the length of fencing required.
(Assume fencing is done along the boundary of the inner rectangle.) 2