Class – VIII   **Subject: Maths**

Topic: 1) Comparing Quantities   2) Direct and Inverse Variation

Based on your understanding of E-lectures cum PPTs, Video Links and other e-resources shared with you, answer the following questions.

Q1: Case Study Questions (4 x 2 = 8 marks)

i)   An average urban Indian uses about 150 litres of water every day.

Activity	Litres per person per day
Drinking	3
Cooking	4
Bathing	20
Sanitation	40
Washing clothes	40
Washing utensils	20
Gardening	23
Total	**150**

a. What percent of water is used for bathing and sanitation together per day?
  A.   60%   B. 30%   C. 40%   D. 50%

b. What is 10% of the total quantity of water used per person per day?
  A.   10 litres   B. 15 litres   C. 20 litres   D. 40 litres

c. How much less percent of water is used for cooking in comparison to that used for bathing?
  A.   16%   B. 32%   C. exactly 10%   D. Around 10%

d. Which activity or activities together use exactly 20% of the total consumption of water?
  A.   Only bathing   B. Drinking, Cooking & Gardening
  C. Cooking & Sanitation   D. Washing utensils & Gardening

ii) Suresh, a government employee has a rectangular piece of land. He wants to build a house on that land. The dimensions of the plot are 50 m × 40 m. He took a loan of 10 lakh from the bank to build the house. The bank charged interest of 10% per annum compounded annually. He cleared the loan after 2 years.

  a. What is the area of land in hectares?
  A. 0.02 hectares   B. 0.002 hectares   C. 0.2 hectares   D. None of these

  b. The Simple interest on Rs 500 at same rate and same time.
  A. Rs 100   B. Rs 200   C. Rs 50   D. Rs 120

  c. If the cost of constructing the house is Rs 800 per metre square, then total cost of constructing the house is
  A. 16 lakhs   B. 20 lakhs   C. 18 lakhs   D. none of these

  d. What is the total money Suresh returned after 2 years to clear the loan?
  A. 12 lakhs   B. 13 lakhs   C. Between 12 lakhs & 13 lakhs
  D. Between 11 lakhs & 12 lakhs

Assertion Reasoning Questions (2x1=2 marks)

Directions for Questions 3 & 4: In each of the questions given below, there are two statements marked Assertion and Reason. Mark your answers as per the codes provided below:

  A) Both assertion and reason are correct and reason is the correct explanation for assertion.
  B) Both assertion and reason are correct but reason is not the correct explanation for assertion.
  C) Assertion is correct but the reason is incorrect.
  D) Both assertion and reason are incorrect.

Q3. Assertion: Compound Interest is always greater than SI on same sum, same ratio and same time.

  Reason: Simple Interest on certain sum of money increases each year at given rate and and time.

Q4: Assertion: Speed and time are in inverse proportion with each other.

  Reason: As the speed increases, the time taken to complete certain distance decreases or when speed decreases, the time taken increases to complete the same distance.
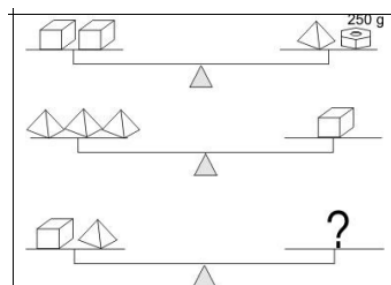
Short Answer Type Questions (2 x 2 = 4 marks)

Q5: A dealer buys a chair and a table at Rs 200 and Rs 500 respectively. For selling, he   marks the table at Rs 525. What price should he ask for the chair if he wants the percentage profit to be same on both the items?

Q6: In 15 days, earth picks up 1.2×10^8 kg of dust from the atmosphere. In how many days, it will pick up 4.8×10^9 kg   dust?

Long Answer Type Questions (2 x 3 = 6 marks)

Q7: Priya can do a piece of work in 12 days and Riya can do the same in 18 days. How many days will they take to do the work together?

Q8(i) Two of the scales given below are balanced. What will be the weight required on the right-hand side to balance the last scale shown below?

  (ii)   Look at this tube of Glow Face cream being sold under a special offer. How many grams of cream does the tube contain?

Note: 1. **Due date of submission: November 21, 2021**

    2. Email your assignment as a PDF file to the concerned teachers, whose email IDs are shared as follows:

Class VIII A	Mr. Sahil Sharma	sahil.sharma98589@gmail.com
Class VIII B	Mr. Ashwani Bakshi	ashwanibakshi1234@gmail.com
Class VIII C	Ms. Meenakshi Kohli	meenakshi.kohli16@gmail.com
Class VIII D, E	Ms. Navneet Kaur	ritunavneet@live.com
Class VIII F, G	Ms. Ambika Sharma	ambica.1sharma@gmail.com
Class VIII H, I	Mr. Sumit Gupta	gupta31318@gmail.com
Class VIII J, K	Mr. Raj Kumar	raj.vasi@yahoo.com

3. Students must mention their name, class/section and date in their assignments.

4. Your assignment will be marked for Internal /Term assessments. Therefore, it is necessary for you to submit it on time.