Banking Daily Quiz Blog - Quant - February 3

Directions : In the following questions, calculate quantity I and quantity II, compare them and answer according to the following options.

1. **Quantity I: Profit earned on selling an article at Rs. 450 at 20% profit**

   Quantity II: Cost price of the article which is sold at Rs.84 on 20% profit

A. **Quantity I > Quantity II**

B. Quantity I < Quantity II

C. Quantity I ≥ Quantity II

D. Quantity I ≤ Quantity II

E. Quantity I = Quantity II or no relation can be established

Solution

Quantity I:

Required profit = $450 \times \frac{20}{120}$ = Rs.75

Quantity II:

Required cost price = $84 \times \frac{100}{120}$ = Rs.70

So, Quantity I > Quantity II.

Directions : In the following questions, calculate quantity I and quantity II, compare them and answer according to the following options.

2. **In a village there are 60% males and rest are females. 30% of total male are illiterate and 25% of total female are illiterate. Number of illiterate males is 1152.**

   Quantity I : Literate females in the village.

   Quantity II : 1940

A Quantity I > Quantity II

B **Quantity I < Quantity II**

C Quantity I ≥ Quantity II

D Quantity I ≤ Quantity II

E Quantity I = Quantity II or no relation can be established

Solution

Quantity I:

$$\text{Required female} = 1152 \times \frac{100}{30} \times \frac{40}{60} \times \frac{100-25}{100} = 1920$$

Quantity II:

1940

So, Quantity I < Quantity II

Directions : In the following questions, calculate quantity I and quantity II, compare them and answer according to the following options.

3. **A man invested Rs. P at 12% p.a. on simple interest for two years.**

Quantity I: If at the end of second year he gets Rs.1200 as interest, then find Rs.P.

Quantity II: Rs.6000

A Quantity I > Quantity II

B **Quantity I < Quantity II**

C Quantity I ≥ Quantity II

D Quantity I ≤ Quantity II

E Quantity I = Quantity II or no relation can be established

Solution

Quantity I:

ATQ,

$\frac{P \times 12 \times 2}{100} = 1200$

P = Rs. 5,000.

Quantity II:

Rs.6,000

So, Quantity I < Quantity II.

Directions : In the following questions, calculate quantity I and quantity II, compare them and answer according to the following options.

4. **Ploughing cost of a rectangular field is Rs.288 at the rate of Rs.3 per square meter. Length of the field is 4 meters more than the width of field.**

   Quantity I : Length of rectangular field.

   Quantity II : 12 meters.

A Quantity I > Quantity II

B Quantity I < Quantity II

C Quantity I ≥ Quantity II

D Quantity I ≤ Quantity II

E **Quantity I = Quantity II or no relation can be established**

Solution

Let breadth of the field be x m.

So, length of the field = $(x + 4)$ m

Area of a rectangular field = $\frac{288}{3} = 96m^2$

ATQ, $x(x + 4) = 96$

$x^2 + 4x - 96 = 0$

$x^2 + 12x - 8x - 96 = 0$

$x(x + 12) - 8(x + 12) = 0$

$(x + 12)(x - 8) = 0$

$x = 8, -12$

Quantity I:

Length of rectangular field = 12m

Quantity II: 12 m

So, Quantity I = Quantity II

Directions : In the following questions, calculate quantity I and quantity II, compare them and answer according to the following options.

5. **Quantity I: Sum of present ages of Sam and Prince is 32 years and Sam is 8 years older than Prince. Find present age of Prince.**

Quantity II: 15 years.

A Quantity I > Quantity II

B **Quantity I < Quantity II**

C Quantity I ≥ Quantity II

D Quantity I ≤ Quantity II

E Quantity I = Quantity II or no relation can be established

Solution

Quantity I:

Let present age of Prashant be x years.

So, present age of Shivam = $(x + 8)$ years

$x + 8 + x = 32$

$x = 12$ years

Quantity II:

15 years

So, Quantity I < Quantity II.

6. **A and B together can complete a work in 4 days . A alone takes 6 days less than B alone takes. In how many days c alone complete the work if he is 50% more efficient than B ?**

A 3 days

B 4 days

C 6 days

D **8 days**

E None of these

Solution

Sol.

Let time taken by A is x and by B is x + 6 days

$\frac{x(x+6)}{2x+6} = 4$

$x^2 + 6x = 8x + 24$

$x^2 - 2x - 24 = 0$

$x = 6$

Time taken by C $= \frac{2}{3} \times 12 = 8$ *days*

7. **There are 240 students in class IX and out of that 40% appeared in exam and in class X 210 students out of that 30% appeared in exam. Then find difference between number of students not appeared in exam from both classes ?**

A 2

B 3

C 4

D 5

E None of these

Solution

$Required\ difference = \frac{70}{100} \times 210 - \frac{60}{100} \times 240 = 147 - 144 = 3$

8. **A vessel contains mixture of milk and water in the ratio of 7:1 respectively. 24 liters mixture is removed from the vessel and if the quantity of remaining milk in the vessel is 56 liters, then find quantity of water in the vessel initially.**

A **11 liters**

B 15 liters

C 12 liters

D 9 liters

E 8 liters

Solution

Let quantity of milk and water in the vessel initially be 7x liters & x liters respectively. ATQ,

$$(7x - 24 \times \frac{7x}{8x}) = 56$$

$$x = 11$$

9. **Ratio of ages of A and B, 4 years later is 8:9 respectively. If average of present ages of A & B is 47 years, then find difference in present ages of A & B.**

A 5 years

B **6 years**

C 3 years

D 2 years

E 4 years

Solution

Let ages of A & B, 4 years later be 8x years & 9x years respectively.

ATQ,

$(8x - 4) + (9x - 4) = 47 \times 2$

$17x = 102$

$x = 6$ years

Required difference $= 9x - 8x = 6$ years