

Quantitative Techniques and Data Interpretation

1. Given below are two statements :

Statement I: A savings account at Bank A pays 6.2% interest, compounded annually. Bank B's savings

account pays 6% compounded semi-annually. Bank B is paying less total interest each year.

Statement II: A sum of money at a certain rate of compound interest doubles in 3 years. In 9 years, it will be P

times original principal. Then $P = 9$.

In the light of the above statements, choose the **correct** answer from the options given below.

A Both Statement I and Statement II are true

B Both Statement I and Statement II are false

C Statement I is true but Statement II is false

D Statement I is false but Statement II is true

2. Consider the following figure that shows the graph of the function F defined by

$F(x) = |2x| + 4$ for all numbers x:

For which of the following functions G defined for all numbers x does the graph of G intersect the graph of F?

A $G(x) = x + 3$

B $G(x) = 2x - 2$

C $G(x) = 2x + 3$

D $G(x) = 3x - 2$

3. If the selling price of 320 Web Cameras is equal to the cost price of 400 Web Cameras, then the percentage

profit is :

A 12%

B 20%

C 40%

4. The cost of the three components A, B and C of an electronic machine worth ₹12,000 in 2020 is given as a

Pie-chart as shown below :

In the following year, the cost of these three components A, B, and C increased by 10%, 20%, and 10%

respectively. The cost of the three components A, B, and C respectively in 2021, was

A ₹3,300, ₹4,950, ₹5,350

B ₹3,300, ₹4,800, ₹5,500

C ₹3,200, ₹4,700, ₹5,600

D ₹3,600, ₹4,800, ₹5,600

5. What is the 95th term of the following letter series?

A, A, B, B, B, B, C, C, C, C, C, D, D, D, D, D, D, D, D, E, ...

A H

B I

C J

D K

6. A certain sum of money earns a simple interest of ₹ 800 over 2-year period. The same sum of money

invested at the same rate of interest and same period on a compound interest basis earns an interest of ₹

900. What is the sum?

A ₹1,200

B ₹1,600

C ₹2,000

D ₹2,400

7. If $x > 0$, then which of the following expressions are equal to 3.6% of $5x/12$?

- A. 3 percent of $20x$
- B. x percent of
- C. $3x$ percent of 0.2

- D. 0.05 percent of $3x$
- E. $3x/200$

Choose the correct answer from the options given below:

- A A and B only
- B A and E only
- C C and D only
- D B and E only

8. Given below are two statements :

Statement I : Ravi walks from his house at a speed of 5 km per hour and reaches the college 10 minutes late.

If he increases the speed by 1 km per hour next day, he reaches the college 4 minutes earlier than the

scheduled time. If the college is P km far from his house, then $P = 7.5$ km.

Statement II: Amit runs $2\frac{1}{3}$ times as fast as Babita. If Amit gives Babita a start of 80 meters, then the winning

post must be 140 meters far so that Amit and Babita might reach it at the same time.

In the light of the above statements, choose the **correct** answer from the options given below.

- A Both Statement I and Statement II are true
- B Both Statement I and Statement II are false
- C Statement I is true but Statement II is false
- D Statement I is false but Statement II is true

9. Let a , b and c be the ages of three persons P , Q and R respectively where $a < b < c$ are natural numbers. If

the average age of P , Q , R is 32 years and if the age of Q is exactly 6 years more than that of P , then what is

the minimum possible value of c ?

- A 34 years
- B 36 years
- C 38 years
- D 32 years

10. Given below are two statements :

A number of distinct 8-letter words are possible using the letters of the word SYLLABUS. If a word is chosen at random, then

Statement I: The probability that the word contains the two S's together is $1/4$

Statement II : The probability that the word begins and ends with L is $1/28$.

In the light of the above statements, choose the **correct** answer from the options given below

- A Both Statement I and Statement II are true
- B Both Statement I and Statement II are false
- C Statement I is true but Statement II is false