

Quiz Date: 11th April 2020

Q1. The average temperature of Delhi for four day in a particular month is 48°C . If the average temperature of second and third days is 34°C and the ratio of the temperatures of first and fourth days is 9 : 11, then find out the temperature of first and fourth days.

- (a) 45.5°C , 49.9°C
- (b) 32.4°C , 39.8°C
- (c) 55.8°C , 68.2°C
- (d) 52.4°C , 46.8°C
- (e) None of these

Q2. Sunita got married 8 years ago. Today her age is $\frac{9}{7}$ times of her age at the time of her marriage. At present her daughter's age is one sixth of her age. What was her daughter's age 3 years ago?

- (a) 6 years
- (b) 4 years
- (c) 1 years
- (d) 3 years
- (e) 5 years

Q3. A person ordered 4 shirts of brand A and some shirts of brand B. The price of one shirt of brand A was twice that of brand B. When the order was executed, it was found that the number of the two brands has been interchanged. This increased the bill by 40%. The ratio of the number of brand A shirts to that of brand B shirts in the original order was:

- (a) 1 : 2
- (b) 1 : 3
- (c) 1 : 4
- (d) 1 : 5
- (e) 2 : 3

Q4. In a certain examination, the average marks of an examinee are 64 per paper. If he had obtained 18 more marks in Mathematics paper and 4 more marks in English paper, his average marks per paper would have been 66. How many papers were there in the examination?

- (a) 11
- (b) 13
- (c) 9
- (d) 15
- (e) 17

Q5. The arithmetic mean of the scores of a group of students in a test was 52. The brightest 20% of them secured a mean score of 80 and the dullest 25% a mean score of 31. The mean score of remaining 55% is: (approx.)

- (a) 45

- (b) 50
- (c) 51.4
- (d) 54.6
- (e) 64.6

Q6. If the ages of A and C are added to twice the age of B, the total becomes 59. If the ages of B and C are added to thrice the age of A, the total becomes 68. And if the age of A is added to thrice the age of B and thrice the age of C, the total becomes 108. What is the age of A?

- (a) 17 years
- (b) 19 years
- (c) 11 years
- (d) 12 years
- (e) 24 years



Q7. Expenses of a hostel are partly constant and partly vary with number of students. When there are 20 students, total expenses are Rs. 2000. When there are 50 students, total expenses are Rs. 3500. Find the total expenses when there are 70 students in the hostel.

- (a) Rs. 4000
- (b) Rs. 5000
- (c) Rs. 3500
- (d) Rs. 5500
- (e) Rs. 4500

Q8. The age of a person k years ago was half of what his age would be k years from now. The age of the same person p years from now would be thrice of what his age was p years ago. What is the value of the ratio $k : p$?

- (a) 3 : 2
- (b) 2 : 3
- (c) 1 : 4
- (d) 4 : 1
- (e) 3 : 5

Q9. The present age of a father is 3 years more than three times the age of his son. Three years hence, father's age will be 10 years more than twice the age of the son. Find the present age of the father.

- (a) 32 years

- (b) 33 years
- (c) 34 years
- (d) 35 years
- (e) 40 years

Q10. In a coconut grove, $(x + 2)$ trees yield 60 nuts per year, x trees yield 120 nuts per year and $(x - 2)$ trees yield 180 nuts per year. If the average yield per year per tree be 100. Then the value of x is:

- (a) 8
- (b) 4
- (c) 12
- (d) 10
- (e) 16

Q11. A says to B "I am twice as old as you were when I was as old as you are". The sum of their ages is 63 years. Find the difference of their ages.

- (a) 9
- (b) 11
- (c) 13
- (d) 8
- (e) 17

Q12. Nine persons went to a hotel for taking their meals. Eight of them spent Rs. 12 each over their meals and their ninth spent Rs. 8 more than the average expending of all the nine. Total money spent by them was:

- (a) 104
- (b) 105
- (c) 116
- (d) 117
- (e) 119

Q13. The average age of 8 persons in a committee is increased by 2 years when two men aged 35 years and 45 years are substituted by two women. The average age of these two women is:

- (a) 52 years
- (b) 56 years
- (c) 48 years
- (d) 44.4 years
- (e) 38.4 years

Q14. The average marks of 14 students was found to be 71. But it was later found that the marks of one student had been wrongly entered as 42 instead of 56 and of another as 74 instead of 32. Find the correct average.

- (a) 67
- (b) 68
- (c) 69

- (d) 71
(e) 75

Q15. The average age of a family of 6 members is 21.5 years. The family includes two couples, one boy and one girl. The average age of first couple is 50% more than the average age of second couple. If average age of children (girl and boy) be 8.5 years then what is the total age of younger couple?

- (a) 42.8 years
(b) 44.8 years
(c) 46.4 years
(d) 48.4 years
(e) 40.8 years

Solutions

S1. Ans.(c)

Sol. Total temperature of first and fourth day = $(4 \times 48 - 2 \times 34)^\circ C$
 $= (192 - 68)^\circ C = 124^\circ C$

Now, according to the question,

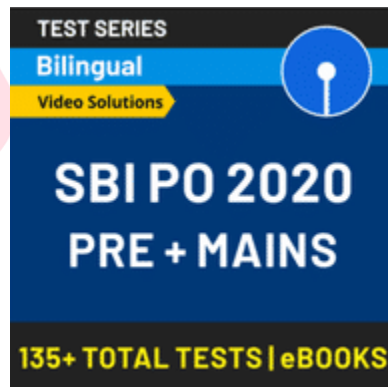
Temperature of the first day

$$= \frac{9}{20} \times 124 = 55.8^\circ C$$

Temperature of fourth day

$$= \frac{11}{20} \times 124 = 68.2^\circ C$$

BANKERS



a247

S2. Ans.(d)

Sol. Let the present age of Sunita be x .

Then, his age at the time of marriage

$$= (x - 8) \text{ years}$$

$$\text{Then, } x = \frac{9}{7}(x - 8)$$

$$2x = 72$$

$$x = 36 \text{ years}$$

$$\text{Present age of Sunita's daughter} = \frac{1}{6} \times 36 = 6 \text{ years}$$

So, 3 years ago, the age of Sunita's daughter = 3 years

S3. Ans.(b)

Sol. Let the number of brand B was n.

If price of one shirt of brand B was Rs. x.

Price of n shirts of brand B = Rs. nx

And Price of 4 shirts of brand A = $4 \times 2x = 8x$

Original bill = Rs. $(8x + nx)$

But after interchange the number of the two brands the bill = Rs. $(2nx + 4x)$

$$(8x + nx) \times \frac{140}{100} = (2nx + 4x)$$

$$x(8 + n) \frac{7}{5} = x(2n + 4x)$$

$$\Rightarrow (8 + n) \times 7 = (2n + 4) \times 5$$

$$56 + 7n = 10n + 20 \Rightarrow 3n = 36 \Rightarrow n = 12$$

Ratio between A and B = $4 : 12 = 1 : 3$

S4. Ans.(a)

Sol. Let the number of papers = x.

According to the question,

$$64x + 18 + 4 = 66x$$

$$\Rightarrow 2x = 22$$

$$\therefore x = \frac{22}{2} = 11$$

S5. Ans.(c)

Sol. Let the mean score of remaining 55%

= x

$$52 = \frac{20 \times 80 + 25 \times 31 + 55 \times x}{100}$$

$$\Rightarrow 5200 = 1600 + 775 + 55x$$

$$\Rightarrow 55x = 5200 - 1600 - 775 = 2825$$

$$\therefore x = \frac{2825}{55} = 51.36 = 51.4$$

S6. Ans.(d)

$$\text{Sol. } A + 2B + C = 59 \quad \dots\dots\dots(i)$$

$$3A + B + C = 68 \quad \dots\dots\dots(ii)$$

$$A + 3B + 3C = 108 \quad \dots\dots\dots(iii)$$

From equation (i)

$$A + C = 59 - 2B \quad \dots\dots\dots(iv)$$

Adding equation (i), (ii) and (iii), we get

$$5A + 6B + 5C = 235$$

$$5(A + C) + 6B = 235 \quad \dots\dots\dots(v)$$

Put value of equation (iv) into equation (v)

$$5(59 - 2B) + 6B = 235$$

After solving we get, B = 15 years

Put value of B in equation (i) and (ii)

$$A + C + 30 = 59$$

$$A + C = 29 \quad \dots\dots\dots(vi)$$

$$\text{And } 3A + 15 + C = 68$$

$$3A + C = 53 \quad \dots\dots\dots(\text{vii})$$

From equation (vi) and (vii), we get $A = 12$ years

S7. Ans.(e)

Sol.

Suppose Expenses = E

$$E = A + Bn$$

Where, A, B are constant and n is the number of students. Now,

$$.2000 = A + 20B$$

$$3500 = A + 50B$$

Solving these equations, $30B = 1500 \Leftrightarrow B = 50$

Hence,

$$A = 1000.$$

Now total expenses, when there are 70 students.

$$E = 1000 + 70 \times 50 = \text{Rs. } 4500$$

S8. Ans. (b)

Sol. Let present age of person is x years

$$\therefore x - k = \frac{1}{2}(x + k)$$

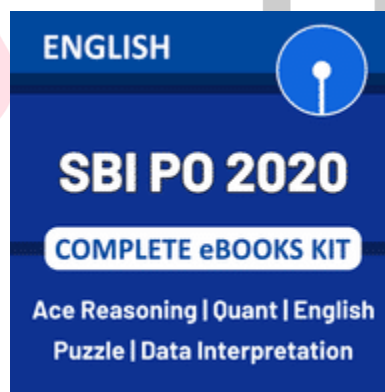
$$\Rightarrow x = 3k$$

$$\text{And, } x - p = \frac{1}{3}(x + p)$$

$$\Rightarrow x = 2p$$

$$\therefore k : p = 2 : 3$$

BANKERS



S9. Ans.(b)

Sol. Let the age of father is x and age of son is y.

So, as per question

$$x - 3y = 3 \quad \dots\dots\dots(\text{i})$$

$$x + 3 - 2(y + 3) = 10$$

$$\text{or } x - 2y = 13 \quad \dots\dots\dots(\text{ii})$$

From (i) and (ii) we get

$$y = 10, x = 33$$

S10. Ans.(b)

Sol. Given: Average yield per year per tree is 100

$$\Rightarrow 100 = \frac{(x+2)60+120x+(x-2)\times 180}{(x+2)+x+x-2}$$

$$\Rightarrow 100 = \frac{60x+120+120x+180x-360}{3x}$$

$$\Rightarrow 300x = 360x - 240$$

$$\Rightarrow 60x = 240$$

$$\Rightarrow x = 4$$

S11. Ans.(a)

Sol.

$$A + B = 63 \quad \dots(i)$$

$$\text{and } A = 2[B - (A - B)]$$

$$\Rightarrow 3A = 4B \quad \dots(ii)$$

From (i) & (ii)

$$A = 36, B = 27$$

\therefore Difference = 9 years.

S12. Ans. (d)

Sol.

No. of persons = 9

Let the average expenditure of 9 persons = x

Now according to question,

$$\frac{12 \times 8 + (x+8)}{9} = x$$

$$96 + x + 8 = 9x \Rightarrow 8x = 104 \Rightarrow x = 13$$

Total money spent by 9 persons = 9x

$$= 9 \times 13 = \text{Rs. } 117$$

S13. Ans. (c)

Sol.

Weight of two men = 35 + 45 = 80

Weight of two women = y kg

Average of 8 persons = x

New average = x + 2

$$8x - 80 + y = 8(x+2)$$

$$y = 96$$

$$\text{Average} = \frac{96}{2} = 48 \text{ years}$$

S14. Ans. (c)

Sol.

Total marks = 71 \times 14 = 994

Correct total marks = 994 + (56 - 42) + (32 - 74) = 966

$$\text{Required average} = \frac{966}{14} = 69$$

S15. Ans.(b)

Sol. Let the average age of younger couple is x years

$$\therefore \text{Average age of elder couple} = \frac{150}{100} \times x = 1.5x \text{ years}$$

ATQ,

$$2x + 3x + 17 = 6 \times 21.5$$

$$5x = 112$$

$$x = 22.4 \text{ years}$$

$$\therefore \text{Total age of younger couple} = 44.8 \text{ years}$$

For any Banking/Insurance exam Assistance, Give a Missed call @ 01141183264

