Averages Questions for LIC AAO PDF

Instructions
For the following questions answer them individually

Question 1

The mean temperature of Monday and Thursday was 36C. If the temperature on Thursday was $\frac{4}{5}$th of that Monday, then what was the temperature on Thursday ?

A 36.5C

B 32C

C 35.5C

D 34C

E None of these

Answer: B

Explanation:
Let temperature on monday be a and that on thursday be y.
(x+y)/2 = 36
Now, y = 0.8x
Hence, we get Monday's temperature as 40
Therefore, none of these is the answer.

Question 2

The sum of five numbers is 555. The average of first two numbers is 75 and the third number is 115. What is the average of last two-numbers ?

A 145

B 150

C 265

D 290

E None of these

Answer: A

Explanation:
Let the numbers be a, b, c, d, and e.

a+b+c+d+e = 555
Now, (a+b)/2 = 75
a+b = 150
and c = 115
therefore, d+e = 290
Average, (d+e)/2 = 145

Question 3

The average score of a class of boys and girls in an examination is A. The ratio of boys and girls in the class is 3: 1. If the average score of the boys is (A + 1), the average score of the girls is:

A (A - 1)

B (A - 3)

C (A +1)

D (A + 3)

Answer: B

Explanation:
Let the common multiple be x.
There are x girls and 3x boys.
Now, let girls score be N.
$\frac{N*x+(A+1)*3x}{4x}$ = A
N = 4A - 3(A+1)
= A - 3
Hence, the average score of girls is A-3

Question 4

The average marks of a class increased by $\frac{1}{3}$ when a student's marks were wrongly entered as 64 instead of 46. The number of students in the class are

A 54

B 58

C 63

D 57

E None of these

Answer: A

Explanation:
Let the number of students be 'x'

Given that the average is increased by $\frac{1}{3}$ due to the increase of 18 marks ($64 - 46 = 18$ marks)

Actual increase in marks $= \frac{1}{3} \times$ x

$\Rightarrow \frac{1}{3} \times x = 18$

$\therefore$ Number of students(x) $= 54$

Question 5

The average age of students in a class is 12. If the average age of boys is 18 and the average age of girls is 14 and If the number of boys are 22, then find the total number of students in the class

A 52

B 55

C 60

D 58

E None of these

Answer: B

Explanation:
Let the total age of boys be 'B'

Average age of boys = 18

$\frac{B}{22} = 18$

$\Rightarrow$ B $= 396$

Let the total age of Girls be 'G'

Let the number of girls be 'x'

Average age of girls $= 14$

$\frac{G}{x} = 14$

$\Rightarrow$ G $= 14$x

Total average of students $= 12$

Total age of students $=$ Total age of boys $+$ Total age of girls $= 396 + 14$x

Total number of students $=$ Number of boys $+$ Number of girls $= 22 +$ x

Average age of class $= 12$

$\Rightarrow \frac{396+14x}{22+x} = 12$

$\Rightarrow 396 + 14$x $= 462 + 12$x

$\Rightarrow 2$x $= 66$

$\Rightarrow$ x $= 33$

$\therefore$ Number of girls $= 33$

Total number of students $= 22 + 33 = 55$

Question 6

In the first 20 overs of a cricket game, the run rate was 4.5, What should be the run rate in the next 30 overs of the game to chase the target of 210?

A 6

B 4

C 8

D 6.5

E None of these

Answer: B

Explanation:
Run-rate = 4.5 runs per over

1 over $\rightarrow 4.5$ runs
20 overs $\rightarrow 20 \times 4.5 = 90$ runs

Total target $= 210$ runs

Remaining score $= 210 - 90 = 120$ runs

Remaining overs $= 30$ overs

$\therefore$ Required run-rate $= \frac{120}{30} = 4$ runs per over

Question 7

In a society, 60% of residents own a car and 40% own a bike. Nobody owns car and bike both. Also, 25% of the residents work in the banking sector. If 20% of those who work in the banking sector own a bike, then the residents who own a car and work in non-banking sector form what percentage of the total people?

A 25%

B 40%

C 37.5%

D 60%

E 42.5%

Answer: B

Explanation:
Let the total number of residents be 100x
People who own car = 60k
People who own a bike = 40k
People who work in the banking sector = 25k
People in the banking sector who own a bike = 20% of 25k = 5k
Rest of the people who work in the banking sector must be owning a car
Number of people owning a car and working in banking sector = 25k - 5k = 20k
Number of people owning a car and working in non-banking sector = 60k - 20k = 40k
Required % = 40k/100k * 100 = 40%
Hence, option B is the correct answer.

Question 8

Amit scored 10% less marks than Sumit and 20% more marks than Rakesh. If Tina scored 35 marks more than Amit and Sumit scored 20 marks less than Tina, what is the absolute difference between the marks of Tina and Rakesh?

A 75

B 82.5

C 37.5

D 57.5

E 40

Answer: D

Explanation:
Let Sumit scored 100x marks
Then, Amit scored 90x marks
Amit's score is 20% more than that of Rakesh.
So, Rakesh's score = 75x
Tina's score = Amit's score + 35 = 90x + 35.....(i)
Tina's score = Sumit's score + 20 = 100x + 20...(ii)
On comparing (i) and (ii),

90x + 35 = 100x + 20
On solving, we get x = 1.5
So, Rakesh's score = 75x = 75* 1.5 = 112.5
And Tina's score = 90x + 35 = 170
Difference = (170 - 112.5) = 57.5
Hence, option D is the correct answer.

Question 9

Seema spends 30% of her salary on the education of her children. She spends 50% of the rest on household expenditures. Of the rest, she invests 14.28% and deposits the rest in the bank. She invests the money in mutual funds and Government bonds in the ratio 2 : 3. If the money invested in Government bonds is Rs. 2400, how much does Seema spend on the education of her children?

A Rs. 48000

B Rs. 80000

C Rs. 24000

D Rs. 10000

E Rs. 18000

Answer: C

Explanation:
Let the total salary be Rs. 100x
Amount spent on education = Rs. 30x
Amount left = Rs. 70x
Amount spent on household expenditures = 50% of Rs. 70x = Rs. 35x
Amount left = Rs. (70x - 35x) = Rs. 35x
Amount invested = 14.28% of Rs. 35x = Rs. 5x
Amount invested in Government bonds = Rs. $\frac{3}{5} * 5x$ = Rs. 3x
It is given that, 3x = 2400
Or, x = 800
So, Amount spent on education = Rs. 30x = Rs. 24000
Hence, option C is the correct answer.

General Knowledge Questions & Answers (Download pdf)

Instructions

A school conducted 5 tests from test 1 to test 5 one after another.
The following table shows the average marks scored in the tests till that test by 5 students in the tests till that test.
For example:- The average marks scored by Ankur in Test 1 and Test 2 = 73
The average marks scored by Ankur in Test 1 ,Test 2 and Test 3 = 69 and so on.

	Test 1	Test 2	Test 3	Test 4	Test 5
Ankur	68	73	69	70	72
Bunty	60	66	63	67	66
Chandu	80	66	65	64	62
Dinesh	70	67	62	59	64
Esha	48	72	76	71	70

Question 10

Who scored the highest marks in Test 3?

A Ankur

B Bunty

C Chandu

D Dinesh

E Esha

Answer: E

Explanation:
Let T1 be test 1, T2 be test 2 and so on.
The average marks scored by Ankur in Test 1 = the marks scored by Ankur in test 1 = 68.
The average marks scored by Ankur in Test 1 and Test 2 = 73
Thus, 73 = (marks scored in T1 + marks scored in T2)/2
Thus, marks scored by Ankur in T2 = 73*2 - 68 = 78.
The average marks scored by Ankur in Test 1 ,Test 2and Test 3 = 69
69 = (marks scored in T1 + marks scored in T2 + marks scored in T3)/3
Thus, marks scored by Ankur in T3 = 207-146 = 61
The average marks scored by Ankur in Test 1 ,Test 2,Test 3 and Test 4 = 70
70 = (marks scored in T1 + marks scored in T2 + marks scored in T3+marks scored in T4)/4
Thus, marks scored by Ankur in T4 = 280-207 = 63.
The average marks scored by Ankur in Test 1 ,Test 2,Test 3, Test 4 and Test 5 = 72
72 = (marks scored in T1 + marks scored in T2 + marks scored in T3+marks scored in T4+marks scored in T5)/5
Thus, marks scored by Ankur in T5 = 360-280 = 80
Similarly, we can calculate the marks scored by all the students in all the tests as shown below in the table format:-

	Test 1	Test 2	Test 3	Test 4	Test 5
Ankur	68	78	61	73	80
Bunty	60	72	57	79	62
Chandu	80	52	63	61	54
Dinesh	70	64	52	50	84
Esha	48	96	84	56	66

Thus, Esha scored the highest marks in Test 3.
Hence, option E is the correct answer.