AVERAGE_CSAT_ANSWER_SOLUTION

Answer 1: (A)

Class starts at 11:00 am and class ends at 2:27 pm.

So, duration of class = 3 hour 27 mint = 207 mint.

There will be 4 periods

After every period there will be 5 mint break. Here only 3 breaks will be taken as there are only 4 periods

Hence, total duration of classes = 207–15=192 mints.

Therefore, duration of each period = 192÷4

= 48 mints

Hence, duration of each class is 48 minutes.

Answer 2: (B)

Let the number of student =N

each student give = Rs. N

Total collection = Number of student × each student contribution

= N×N =N^2

Now, one student's contribution is increased by 2

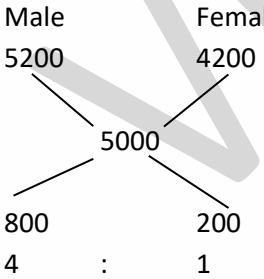
So, total collection =N×N+2 =443

N^2=441

N=21

Number of students =21

Answer 3: (B)



Percentage of male employees in the company= $\frac{4}{5}\times 100$

= 80%

Answer 4: (B)

Present age of 5 members=80+3×5=95

Average age of 5 members 3 years ago = $\frac{80}{5}$

= 16 years

ATQ

Average of 6 members at present is same as average age of 5 members 3 years ago.

So sum of 6 member (including baby) at present =16×6

=96 years

Age of baby = 96–95

=1 year

Age of baby is 1 year

Answer 5: (A)

Monthly salary of a person=5×10,000

= 50,000

Increase in salary of one person per month = $\frac{12000}{12}$

= 10,000

Now, total salary =50,000+10,000

=60,000

Average salary of 5 persons= $\frac{60,000}{5}$

=12,000

Answer 6 (C)

Sum of the age of 9 persons=9×50

=450

Sum of the age of 5 persons=5×45

= 225

Sum of the age of last 5 persons =5×55

= 275

Weight of 5^{th} person=(275+225–450)

= 50 kg

Answer 7: (C)

Amount of rainfall in first 4 days

= 0.40×4

= 1.6 inches

Amount of rainfall in 6 days=0.50×6
= 3 inches
Let rainfall in 5th and 6th day is 4x and 3x respectively.
ATQ.
1.6+4x+3x=3
7x =3–1.6
7x =1.4
x=0.2 inches
Rainfall in 5th day = 4x
=4×0.2
=0.8 inches

Answer 8: (B)
Sum of marks of 100 students = 100×40
= 4000
Total correct marks=4000–83+53
= 3970
Correct average= $\frac{3970}{100}$
= 39.7

Answer 9: (D)
Sum of the weight of mother and children
= 50×3 =150
$\Rightarrow$ Sum of the weight of children and father = 52×3 =156
$\Rightarrow$ Sum of the weight of children =156–60
=96 kg
$\Rightarrow$ Weight of mother 150–96 =54 kg

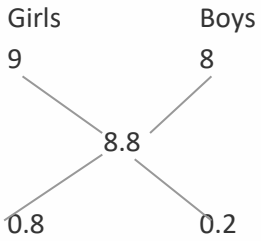
Answer 10: (D)
Let the three pieces be a, b and c .
length of a = Average of three single digit odd prime numbers
$\Rightarrow \frac{3+5+7}{3}$
$=5$
Length of b= $a+\frac{c}{3}$
$b=\frac{3a+c}{3}$
$b=\frac{3\times5+c}{3}$
$b=\frac{15+c}{3}$.....(i)
$c=a+b$.....(ii)

From (i) & (ii)
$b=\frac{15+a+b}{3}$
$3b=20+b$
$2b=20$
$b=10$
$c=a+b$
$c=10+5$
$c=15$

Length of original sheet=a+b+c
= 5+10+15
=30 units.

Answer 11: (C)
Let the age of each student = x years
Age of teacher will be (x+20) years
Mean age =
$\frac{x+20+3x}{4}$
$20=\frac{4x+20}{4}$
$x=15$
Age to teacher = 35 years

Answer 12: (A)



$\frac{\text{Girls}}{\text{Boys}}=\frac{4}{1}$
$x=\frac{4\times8+1\times7}{4+1}$
$=\frac{39}{5}$
$=7.8$

Answer 13: (C)
Total score in 50 innings = 50×46.4
= 2320
Total score in 60 innings = 60×49

= 2940

Average score in last ten innings

$$= \frac{2940 - 2320}{10}$$

$$= \frac{620}{10}$$

$$= 62$$

Answer 14: (C)

According to the question.

No student going out of the class and no new student coming in the class.

Total student weight same all the time and total no of students same . They are just interchange the group.

Hence, average weight of the students of the class is same