Quiz Date: 27th July 2020
Directions (1-6): Find the approximate value of the following questions.
Q1. $1011.11+110.1+111.01=$ ?
(a) 1232
(b) 1300
(c) 1130
(d) 1070
(e) 1700

Q2. $12.005 \%$ of $624.999=$ ?
(a) 91
(b) 58
(c) 62
(d) 75
(e) 80

Q3. $16.007 \times 14.995 \times 6.080=$ ?
(a) 1510
(b) 1440
(c) 1200
(d) 1330

(e) 1480

Q4. $7000.001 \div 699.983 \times 4.020=$ ?
(a) 58
(b) 32
(c) 60
(d) 40
(e) 50

Q5. $23.999 \times 9.004 \times 16.997=$ ?
(a) 3200
(b) 4100
(c) 2700
(d) 3670
(e) 3400

Q6. $449.97 \div 15.02+208.08 \div 8.01-16.01=$ ?
(a) 120
(b) 60
(c) 100
(d) 80
(e) 40

## Direction (7-11): Read the data carefully and answer the questions.

In a school ' $X$ ' there are eight classes i.e. one to eight. Total student in class two is $16 \frac{2}{3} \%$ more than total students in class one, while number of students in class five is $33 \frac{1}{3} \%$ less than that of students in class one. Total students in class one, two and five together is 204. Total students in class three is 12 more than total students in class two. Total students in school ' X ' is $86 \%$ more than sum of students in class one, two, three \& five together. Total students in class eight is 14 more than total students in class four, while total students in class seven is 4 less than total students in class four. Total students in class six is 22 less than total students in class eight.

Q7. Find average of number of students in class two, three, five and seven?
(a) 64
(b) 56
(c) 84
(d) 72
(e) 96

Q8. Total students in class three \& four together is what percent more than total students in class one \& eight together?
(a) $6 \frac{2}{3} \%$
(b) $4 \frac{2}{3} \%$
(c) $9 \frac{2}{3} \%$
(d) $3 \frac{2}{3} \%$
(e) $1 \frac{2}{3} \%$


Q9. Find the ratio between total students in class five \& six together to total students in three \& seven together?
(a) $2: 5$
(b) $2: 7$
(c) $2: 3$
(d) $2: 9$
(e) $2: 11$

Q10. If total students in class eight of school ' Y ' is $37 \frac{1}{2} \%$ more than total students in class three of school ' $X$ ', then total students in class eight of school ' Y ' is what percent less than total students in class three \& four together of school ' $X$ '?
(a) $12.5 \%$
(b) $22.5 \%$
(c) $20.5 \%$
(d) $17.5 \%$
(e) $15.5 \%$

Q11. Find total number of students in class one, three, five \& seven of school ' X '?
(a) 256
(b) 276
(c) 284
(d) 302
(e) 316

Direction (12-15): Given below data regarding number of Samsung mobile sold by store on seven days of week (Sunday to Saturday). Read the data carefully and answer the questions. Total mobile sold on Wednesday is $33 \frac{1}{3} \%$ more than that of total mobile sold on Tuesday, while total mobile sold by store on Saturday is $10 \%$ less than total mobile sold by store on Wednesday. Average number of mobile sold by store on Monday, Tuesday, Wednesday \& Saturday is 205 and total mobile sold by store on Monday is 4 more than that of total mobile sold by store on Tuesday. Total number of mobile sold by store on Friday is 24 more than that of total number of mobile sold by store on Thursday, while total number of mobile sold on Sunday is 32 less than total mobile sold by store on Thursday. Total mobile sold by store in the week is 1400.

Q12. Total mobile sold by store on Wednesday is what percent less than total mobile sold by store on Monday \& Saturday together?
(a) $35 \%$
(b) $32 \%$
(c) $45 \%$
(d) $40 \%$
(e) $48 \%$

Q13. Find ratio between total mobile sold by store on Monday \& Thursday together to total mobile sold by store on Friday?
(a) $19: 11$
(b) $19: 13$
(c) $19: 15$
(d) $19: 17$
(e) $19: 9$

Q14. Find average number of mobile sold by store on Tuesday, Wednesday \& Saturday?
(a) 202
(b) 208
(c) 212
(d) 224
(e) 236

Q15. Total mobile sold by store on Sunday \& Saturday together is what percent more than total mobile sold by store on Monday \& Thursday together?
(a) $1 \%$
(b) $2 \%$
(c) $3 \%$
(d) $4 \%$
(e) 0\%

## Solutions

S1. Ans.(a)
Sol. $\mathrm{x}=1011.11+110.1+111.01=1232.22=1230$ (Approx.)
S2. Ans.(d)
Sol.

$$
\begin{aligned}
? & \simeq 625 \times \frac{12}{100} \\
& \simeq 75
\end{aligned}
$$




S3. Ans.(b)
Sol.

```
?\simeq 16 < 15 \times 6
?\simeq 1440
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S4. Ans.(d)
Sol.

$$
\begin{aligned}
& x=7000.001 \div 699.983 \times 4.020 \\
& \simeq 70000 \times \frac{1}{700} \times 4 \\
& \simeq 40 \text { (Approx.) }
\end{aligned}
$$

S5. Ans.(d)
Sol.
$x=23.999 \times 9.004 \times 16.997$
$=24 \times 9 \times 17$
$=3672$
$=3670$ (Approx.)

S6. Ans.(e)
Sol.
$?=449.97 \div 15.2+208.08 \div 8.01-16.01 \approx 450 \div 15+208 \div 8-16$
$=30+26-16=30+10=40$

## S (7-11):

Let total students in class one $=100 \mathrm{x}$
So, total students in class two $=100 \mathrm{x}+\frac{50 x}{3}=\frac{350 x}{3}$
Total students in class five $=100 \mathrm{x}-\frac{100 x}{3}=\frac{200 x}{3}$
Given, $100 \mathrm{x}+\frac{350 x}{3}+\frac{200 x}{3}=204$

$$
\begin{gathered}
850 x=612 \\
x=0.72
\end{gathered}
$$

Total students in class one $=100 \times 0.72=72$
Total students in class two $=\frac{350 \times 0.72}{3}$

$$
=84
$$

Total students in class five $=\frac{200 \times 0.72}{3}$

$$
=48
$$

Total students in class three $=84+12=96$
Total students in school ' $X$ ' $=(72+84+48+96) \times \frac{186}{100}$

$$
\begin{aligned}
& =300 \times \frac{186}{100} \\
& =558
\end{aligned}
$$

Total students in class four, six, seven \& eight $=558-300=258$
Let total students in class four $=y$
So total students in class eight $=\mathrm{y}+14$
Total students in class seven $=y-4$
Total students in class six $=\mathrm{y}+14-22=y-8$
ATQ -
$\mathrm{y}+\mathrm{y}+14+\mathrm{y}-4+y-8=258$
$4 y+2=258$
$4 y=256$
$y=64$
Total students in class four $=64$
Total students in class eight $=64+14=78$
Total students in class seven $=64-4=60$
Total students in class six $=64-8=56$

| Classes | Students |
| :--- | :---: |
| One | 72 |
| Two | 84 |
| Three | 96 |
| Four | 64 |
| Five | 48 |
| Six | 66 |
| Seven | 78 |
| Eight |  |

S7. Ans(d)
Sol.
Total students in class two, three, five and seven
$=84+96+48+60$
$=288$
Required average $=\frac{288}{4}=72$
S8. Ans(a)
Sol.
Total students in class three \& four $=96+64=160$
Total students in class one \& eight $=72+78=150$
Required percentage $=\frac{160-150}{150} \times 100$

$$
\begin{aligned}
& =\frac{10}{150} \times 100 \\
& =6 \frac{2}{3} \%
\end{aligned}
$$

S9. Ans(c)
Sol.
Total students in class five \& six $=48+56=104$
Total students in class three \& seven $=96+60=156$
Required ratio $=\frac{104}{156}$

$$
=2: 3
$$

S10. Ans(d)
Sol.
Total students in class eight of school ' $\mathrm{Y}=96 \times \frac{11}{8}=132$

Required percentage $=\frac{160-132}{160} \times 100$

$$
\begin{aligned}
& =\frac{28}{160} \times 100 \\
& =17.5 \%
\end{aligned}
$$

S11. Ans(b)
Sol.
Total number of students in class one, three, five \& seven of school ' X '
$=72+96+48+60$
$=276$

## S(12-15):

Let total number of mobile sold by store on Tuesday $=100 \mathrm{x}$
Total mobile sold by store on Wednesday $=100 x \times \frac{4}{3}=\frac{400 x}{3}$
Total number of mobile sold by store on Saturday $=\frac{400 x}{3} \times \frac{90}{100}=120 x$
Total mobile sold by store on Monday $=100 \mathrm{x}+4$
Given,
$100 \mathrm{x}+\frac{400 x}{3}+120 x+100 x+4=205 \times 4$
$\frac{960 x+400 x}{3}=816$
$1360 x=2448$
$\mathrm{x}=\frac{2448}{1360}$
$\mathrm{x}=1.8$
Total number of mobile sold by store on Tuesday $=1.8 \times 100=180$
Total mobile sold by store on Monday $=1.8 \times 100+4=184$
Total mobile sold by store on Wednesday $=\frac{400 \times 1.8}{3}=240$
Total number of mobile sold by store on Saturday $=1.8 \times 120=216$
Let total mobile sold by store on Thursday $=y$
So, total mobile sold by store on Friday $=\mathrm{y}+24$
Total mobile sold by store on Sunday $=y-32$
Total mobile sold by store on Thursday , Friday \& Sunday $=1400-820=580$
Also, $\mathrm{y}+\mathrm{y}+24+\mathrm{y}-32=580$
$3 y=588$
$y=196$
Total mobile sold by store on Friday $=196+24=220$
Total mobile sold on Sunday =196-32=164

| Days | Sold mobiles |
| :---: | :---: |
| Sunday | 164 |
| Monday | 184 |


| Tuesday | 180 |
| :--- | :---: |
| Wednesday | 240 |
| Thursday | 196 |
| Friday | 220 |
| Saturday | 216 |

## S12. Ans(d)

Sol.
Total mobile sold on Monday \& Saturday together $=184+216=400$
Required percentage $=\frac{400-240}{400} \times 100$

$$
=\frac{160}{400} \times 100=40 \%
$$

## S13.Ans(a)

Sol.
Total mobile sold by store on Monday \& Thursday together $=184+196=380$
Required ratio $=\frac{380}{220}$

$$
=19: 11
$$

S14. Ans(c)
Sol.
Total mobiles sold by store on Tuesday, Wednesday \& Saturday $=180+240+216=636$
Required average $=\frac{636}{3}=212$
S15. Ans(e)
Sol.
Total mobile sold by store on Sunday \& Saturday together= $164+216=380$
Total mobile sold by store on Monday \& Thursday together= 184+196=380
Difference $=0$
Required percentage $=0 \%$

