Quiz Date: 4 ${ }^{\text {th }}$ October 2020
Directions (1-5):Study the following Graph carefully and answer the question given below.


Q1. What is the respective ratio of the amount of rice, wheat and sugar consumed by Restaurant B to the same consumed by Restaurant E?
(a) $18: 17$
(b) $29: 27$
(c) $33: 28$
(d) $39: 38$
(e) $34: 31$

Q2. What is the average amount of rice, Wheat and sugar consumed by all the restaurants?
(a) 1800 kgs .
(b) 1790 kgs.
(c) 1900 kgs .
(d) 1950 kgs .
(e) 1570 kgs .

Q3. Sugar consumed by Restaurant $D$ is approximately what per cent of rice and wheat consumed by the same Restaurant? (in \%)
(a) 32
(b) 25
(c) 38
(d) 42
(e) 29

Q4. Rice consumed by Restaurant C is approximately what per cent of the rice consumed by all the Restaurants together? (in \%)
(a) 12
(b) 18
(c) 21
(d) 24
(e) 16


Q5. What is the difference between the average amount of wheat and the average amount of sugar consumed by all the Restaurants together?
(a) 145 kgs .
(b) 160 kgs .
(c) 155 kgs .
(d) 150 kgs .
(e) 147 kgs .

Q6.In an election between two candidates, one got $55 \%$ of total valid votes and $20 \%$ of the total votes casted were invalid. If total votes were 7500 , then what is the number of valid votes that the other person got?
(a) 2550
(b) 2670
(c) 2700
(d) 2850
(e) 2500

Q7.The price of petrol is increased by $25 \%$ by what percent should a car owner reduce the consumption of petrol so that his expenditure on petrol remains constant?
(a) $18 \%$
(b) $16 \%$
(c) $15 \%$
(d) $20 \%$
(e) $14 \%$

Q8.The average age of a class of 20 students increases by 2 when 4 new students join. If the original average age was 18 years, then find the sum of ages of four students who join. (in years)
(a) 125
(b) 112
(c) 115
(d) 120
(e) 108

Q9. A and B started a business with the investments in the ratio of $5: 3$ respectively. After 6 months from the start of the business, $C$ joined them and the respective ratio between the investments of $B$ and $C$ was $2: 3$. If the annual profit earned by them was Rs. 12300, what was the difference between B's share and C's share in the profit?
(a) Rs. 900
(b) Rs. 800
(c) Rs. 600
(d) Rs. 400
(e) Rs. 700

Q10. The manufacturer of an article makes a profit of $5 \%$, the wholesale dealer makes a profit of $10 \%$, and the retailer makes a profit of $15 \%$. Find the manufacturing price of the article if the retailer sold it for Rs. 5313.
(a) Rs. 4000
(b) Rs. 4500
(c) Rs. 5000
(d) Rs. 4950
(e) Rs. 4200

Directions(11-13): What approximate value will come in place of the question-mark (?) in the following questions?
Q11. $16.5 \%$ of $1399.921+114.78 \%$ of $1211=$ ?
(a) 1270
(b) 1350
(c) 1490
(d) 1530
(e) 1620

Q12. $\sqrt{1220} \times 16.06+\sqrt{4897}=$ ?
(a) 610
(b) 620
(c) 630
(d) 640
(e) 650

Q13. $18.08 \times 11.898+22.922 \times 14.94=$ ?
(a) 520
(b) 560
(c) 540
(d) 580
(e) 610

Directions (14-15): What should come in place of question mark (?) in the following number series?
Q14. 8, 14, 32, 70, 136, ?
(a) 248
(b) 247
(c) 237
(d) 238
(e) 254

Q15. 52, 26, 26, 39, 78, ?, 585
(a) 195
(b) 156
(c) 234
(d) 117
(e) 139

## Solutions

S1. Ans.(d)
Sol. Ratio $=600+800+550: 650+750+500$
= 1950 : 1900
= $39: 38$
S2. Ans.(a)
Sol. Total consumption of rice, wheat and sugar :
Restaurant A = 1950 kgs
Restaurant B = 1950 kgs
Restaurant C = 1400 kgs
Restaurant D $=1800 \mathrm{kgs}$
Restaurant E $=1900$ kgs
Average $=\frac{1950+1950+1400+1800+1900}{5}=1800 \mathrm{kgs}$
S3. Ans.(c)
Sol. $\frac{500}{(700+600)} \times 100$
$=\frac{500}{1300} \times 100=38.46 \% \approx 38 \%$ (approx)
S4. Ans.(e)
Sol. $\frac{500}{3200} \times 100=15.63 \% \approx 16 \%$ (approx)

S5. Ans.(b)
Sol. Average $($ wheat $)=\frac{3300}{5}=660 \mathrm{kgs}$
Average (sugar) $=\frac{2500}{5}=500 \mathrm{kgs}$
Difference $=660-500=160 \mathrm{kgs}$
S6. Ans.(c)
Sol.
No. of valid votes that other person got
$=\frac{45}{100} \times \frac{80}{100} \times 7500$
$=\frac{9}{20} \times \frac{4}{5} \times 7500$
$=2700$
S7. Ans.(d)
Sol.
Using the formula,
\% reduction in consumption
$=\frac{25}{(100+25)} \times 100$
$=20 \%$
S8. Ans.(d)
Sol.
Let, sum of ages of 4 new students is $x$ years,
$\frac{20 \times 18+\mathrm{x}}{(20+4)}=(18+2)$
or, $360+x=24 \times 20$
or, $x=480-360=120$ years
S9. Ans.(a)
Sol.
$A: B=5: 3=10: 6$
B: $C=2: 3=6: 9$
A : B : C = $10: 6: 9$ or $10 \mathrm{x}: 6 \mathrm{x}: 9 \mathrm{x}$
Ratio of profit $=(10 x \times 12):(6 x \times 12):(9 x \times 6)$
= $20: 12: 9$
Required difference $=\frac{12-9}{41} \times 12300$
$=900$ Rs.
S10. Ans.(a)
Sol.
Let the manufacturing price is Rs. MP
$\mathrm{MP} \times \frac{105}{100} \times \frac{110}{100} \times \frac{115}{100}=5313$
$\mathrm{MP}=$ Rs. 4000


S11. Ans.(e)
Sol.
$\frac{16.5}{100} \times 1400+\frac{115}{100} \times 1210=231+1391$
$=1622 \approx 1620$

S12. Ans.(c)
Sol.
$35 \times 16+70=560+70 \approx 630$
S13. Ans.(b)
Sol.
$18 \times 12+23 \times 15$
$216+345 \approx 560$
S14. Ans (d)
Sol.


S15. Ans (a)
Sol. $\times 0.5, \times 1, \times 1.5, \times 2, \times 2.5$.

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\therefore 78 \times 2.5=195
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