## Quiz Date: $\mathbf{1 1}^{\text {th }}$ March 2020

Directions (1-5): Table given below show the distribution of Watches of two companies (A and B) sold by five sellers. In this some are Analog Watch and remaining are Digital Watch. Study the data carefully and answer the following question.

| Sellers | Total Watch Sold | Analog Watch <br> sold <br> (in \%) | A : B <br> (Analog <br> Watch) | A : B <br> (Digital <br> Watch) |
| :---: | :---: | :---: | :---: | :---: |
| Anurag | 12000 | $52 \%$ | $5: 8$ | $7: 5$ |
| Mohit | 9000 | $65 \%$ | $7: 6$ | $4: 3$ |
| Amit | 7500 | $60 \%$ | $11: 4$ | $5: 3$ |
| Deepak | 14000 | $40 \%$ | $4: 3$ | $3: 5$ |
| Manish | 10500 | $45 \%$ | $4: 5$ | $7: 4$ |

Q1. Total Digital Watch of company 'A' sold by Mohit is what percent more than total Analog Watch of company 'B' sold by Amit?
(a) $35 \%$
(b) $37.5 \%$
(c) $40 \%$
(d) $45 \%$
(e) $50 \%$

Q2. Total Watch sold by Deepak and Manish together of company ' B ' is how much more than total Watch sold by Amit and Deepak together of company 'A'.
(a) 900
(b) 850
(c) 800
(d) 750
(e) 700

Q3. Average number of Analog Watch of company A sold by Anurag, Mohit and Amit together is how much more than average number of Analog Watch of company A sold by Deepak and Manish together.
(a) 200
(b) 225
(c) 250
(d) 300
(e) 350

Q4. Digital Watch of company A sold by Amit is what percent more than the same type of Watch sold by him of company B?
(a) $40 \%$
(b) $66 \frac{2}{3} \%$
(c) $33 \frac{1}{3} \%$
(d) $60 \%$
(e) $54 \frac{1}{3} \%$

Q5. Find the total number of Watch of company 'B' sold by Anurag \& Mohit together?
(a) 12,760
(b) 11,420
(c) 10,290
(d) 11,920
(e) 11,240


Directions (6-10): Table shows result of five states boards exam, percentage of total passed students out of total appeared students in each board, percentage of boys passed out of total passed students and total number of schools in each board. Some data are missing, which have to calculate according to given information in questions.

| Boards | Passed \% out of <br> appeared | Boys passed\% out <br> of total passed | Total number of school <br> in each state board |
| :---: | :---: | :---: | :---: |
| U.P. Board | $64 \%$ | - | 7500 |
| M.P. Board | - | $40 \%$ | 5000 |
| Rajasthan Board | - | $65 \%$ | - |
| Delhi Board | $80 \%$ | - | 4500 |
| Bihar Board | - | $60 \%$ | - |

Q6. If average number of students appeared from each schools of U.P board are 360 and out of total passed students $66 \frac{2}{3} \%$ are girls. Find total passed boys in U.P. board are what percent of total students appeared in U.P board exam ?
(a) $23 \frac{1}{3} \%$
(b) $22 \frac{1}{3} \%$
(c) $19 \frac{1}{3} \%$
(d) $20 \frac{1}{3} \%$
(e) $21 \frac{1}{3} \%$

Q7. If total passed boys in M.P board are 4.2 lakh and ratio between total passed students to total appeared students in that board is $7: 10$. Then average students appeared from each school in M.P. board is how much less than average students appeared from each school in U.P. board.(take average of students appeared from each school in U.P. board from previous question )
(a) 65
(b) 45
(c) 50
(d) 60
(e) 55

Q8. Total passed boys in Rajasthan board are 6.825 lakh and total passed students in Rajasthan board are $70 \%$ of total appeared students of that board. If average number of students appeared in Rajasthan board from each schools are 750, then find total number of schools in Rajasthan board ?
(a) 2570
(b) 2000
(c) 1750
(d) 1950
(e) 2200

Q9. If total number of passed students in Delhi board are 28.8 lakh and ratio between total passed boys to total passed girls of that board is $4: 5$. Then find total passed girls are what percent of total students appeared in Delhi board?
(a) $40 \frac{4}{9} \%$
(b) $42 \frac{4}{9} \%$
(c) $44 \frac{4}{9} \%$
(d) $38 \frac{4}{9} \%$
(e) $46 \frac{4}{9} \%$

Q10. If ratio between total appeared students to total passed students in Bihar board is 5 : 3 and total passed boys in Bihar state are 9 lakh. Find ratio between total schools in Delhi state board to Bihar board, if average of appeared from each schools in students Bihar board is 800 ?
(a) $39: 25$
(b) $37: 25$
(c) $36: 29$
(d) $36: 25$
(e) $25: 36$

S1. Ans.(e)


Sol.
Total Digital Watch of company 'A' sold by Mohit $=9000 \times \frac{35}{100} \times \frac{4}{7}=1800$
Total Analog Watch of company 'B' sold by Amit $=7500 \times \frac{60}{100} \times \frac{4}{15}=1200$
Required $\%=\frac{1800-1200}{1200} \times 100=50 \%$
S2. Ans.(b)
Sol.
Total Watch sold by Deepak \& Manish together of company 'B’
$=14000 \times\left[\frac{40}{100} \times \frac{3}{7}+\frac{60}{100} \times \frac{5}{8}\right]+10,500\left[\frac{45}{100} \times \frac{5}{9}+\frac{55}{100} \times \frac{4}{11}\right]$
$=2400+5250+2625+2100=12,375$
Total Watch sold by Amit \& Deepak together of company A
$=7500\left[\frac{60}{100} \times \frac{11}{15}+\frac{40}{100} \times \frac{5}{8}\right]+14000\left[\frac{40}{100} \times \frac{4}{7}+\frac{60}{100} \times \frac{3}{8}\right]$
$=3300+1875+3200+3150$
$=11,525$
Required difference $=12,375-11,525$
$=850$


S3. Ans.(d)
Sol.
Average no. of Analog Watch of company 'A' sold by Anurag, Mohit \& Amit together
$=\frac{1}{3}\left[12000 \times \frac{52}{100} \times \frac{5}{13}+9000 \times \frac{65}{100} \times \frac{7}{13}+7500 \times \frac{60}{100} \times \frac{11}{15}\right]$
$=\frac{1}{3}[2400+3150+3300]=2950$
Average no. of Analog Watch of company 'A' sold by Deepak \& Manish together
$=\frac{1}{2}\left[14000 \times \frac{40}{100} \times \frac{4}{7}+10,500 \times \frac{45}{100} \times \frac{4}{9}\right]$
$=\frac{1}{2}[3200+2100]=2650$
Required difference $=2950-2650=300$

S4. Ans.(b)
Sol.
Digital Watch of company 'A' sold by Amit
$=7500 \times \frac{40}{100} \times \frac{5}{8}=1875$
Digital Watch of company 'B' sold by Amit
$=7500 \times \frac{40}{100} \times \frac{3}{8}=1125$
Required $\%=\frac{1875-1125}{1125} \times 100=66 \frac{2}{3} \%$
Alternate,
It can be done without solving values (by ratio)
Required $\%=\frac{5-3}{3} \times 100=\frac{200}{3} \%$
$=66 \frac{2}{3} \%$

## S5. Ans.(c)

Sol.
Total number of Watch of company B sold by Anurag \& Mohit together
$=12000 \times \frac{52}{100} \times \frac{8}{13}+12000 \times \frac{48}{100} \times \frac{5}{12}+9000 \times \frac{65}{100} \times \frac{6}{13}+9000 \times \frac{35}{100} \times \frac{3}{7}$
$=3840+2400+2700+1350=10,290$

S6. Ans.(e)
Sol.
Total students appeared in U.P. board exam
$=360 \times 7500$
$=27$ lakh
Total passed boys in U.P board $=27 \times \frac{64}{100} \times \frac{100}{3} \times \frac{1}{100}$
$=5.76$ lakh
Required $\%=\frac{5.76}{27} \times 100$
$=21 \frac{1}{3} \%$

S7. Ans.(d)
Sol.
Total number of passed students in M.P. board
$=\frac{4.2}{40} \times 100$
$=10.5$ lakh
Total students appeared in M.P. board
$=\frac{10.5}{7} \times 10$
= 15 lakh
Average students appeared from each school in M.P. board
$=\frac{15 \text { lakh }}{5000}$
$=300$
Required difference
$=360-300$
$=60$ students

S8. Ans.(b)


Sol.
Total passed students in Rajasthan Board exam
$=\frac{6.825}{65} \times 100$
= 10.5 lakh
Total appeared students in Rajasthan board $=\frac{10.5}{70} \times 100$

$$
\text { = } 15 \text { lakh }
$$

Total number of schools in Rajasthan board $=\frac{15 \text { lakh }}{750}$

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=2000
$$

S9. Ans.(c)
Sol.
Total students appeared in Delhi state board $=\frac{28.8}{80} \times 100$
= 36 lakh
Required $\%=\frac{28.8 \times \frac{5}{9}}{36} \times 100$
$=\frac{16}{36} \times 100$
$=44 \frac{4}{9} \%$


S10. Ans.(d)
Sol.
Total passed students in Bihar board $=\frac{9 \text { lakh }}{60} \times 100$

= 15 lakh
Total appeared students in Bihar board $=\frac{15}{3} \times 5$
$=25$ lakh
Required Ratio $=\frac{4500}{\frac{25 \text { lakh }}{800}}$
$=\frac{4500}{3125}$
$=36: 25$

