## Quiz Date: 16 $^{\text {th }}$ April 2020

Directions (1-5): Percentage of students interested in studying different subjects (Hindi, English, Computer, Math, Science, Sanskrit) in Pie chart I \& percentage of girls interested in studying these subjects in pie chart II.


RATIO OF BOYS : GIRL = 5:3
TOTAL STUDENTS $=48,000$
Q1. For which of the subject, the ratio of percentage of student interested in that subject to the percentage of girls interested in that subject is minimum?
(a) Science
(b) Computer
(c) Math
(d) English
(e) Hindi


Q2. What is the difference between the no. of girls interested in studying computer and that of science?
(a) 1.5 thousand
(b) 2.2 thousand
(c) 1.8 thousand
(d) 1.9 thousand
(e) 1.2 thousand

Q3. What is the ratio of the no. of boys interested in Computer and English together to that of girls interested in studying Sanskrit and Math together?
(a) $124: 117$
(b) $128: 119$
(c) $19: 17$
(d) $23: 19$
(e) None of these

Q4. What is the ratio of the no. of students interested in studying Math and Sanskrit together to that interested in Hindi and Science together?
(a) $23: 32$
(b) $34: 43$
(c) $101: 130$
(d) $11: 32$
(e) None of these

Q5. No. of girls studying Hindi and English together is approximately what percent of the no. of boys studying the same subject?
(a) $27 \%$
(b) $30 \%$
(c) $17 \%$
(d) $23 \%$
(e) $21 \%$

Directions (6-10): The pie-graph given here shows the spending of a country on various sports during a particular year. Study the graph carefully and answer the questions given below it.


Q6. What percent of the total spending is spent on Tennis?
(a) $12.5 \%$
(b) $22.5 \%$
(c) $25 \%$
(d) $45 \%$
(e) $50 \%$

Q7. How much percent more is spent on Hockey than that on Golf?
(a) 27\%
(b) $35 \%$
(c) $37.5 \%$
(d) $75 \%$
(e) $80 \%$

Q8. How much percent less is spent on Football than that on Cricket?
(a) $\frac{200}{9} \%$
(b) $27 \%$
(c) $\frac{100}{3} \%$
(d) $\frac{75}{2} \%$
(e) $25 \%$

Live Class, Video Course
Test Series, eBooks
English (with eBooks)
Q9. If the total amount spent on sports during the year was Rs. 2 crores, the amount spent on Cricket and Hockey together was:
(a) Rs. 8,00,000
(b) Rs. 80,00,000
(c) Rs. 1,20,00,000
(d) Rs. 1,60,00,000
(e) None of these

Q10. If the total amount spent on sports during the year be Rs. 1,80,00,000, the amount spent on Basketball exceeds that on Tennis by:
(a) Rs. 2,50,000
(b) Rs. 3,60,000
(c) Rs. 3,75,000
(d) Rs. 4,10,000
(e) Rs. 2,60,000

Directions (11-15): The pie-chart given here shows expenditures incurred by a family on various items (in degrees) and their savings, which amount to Rs. 8000 in month.


Q11. How much expenditure is incurred on education?
(a) Rs. 3000
(b) Rs. 5000
(c) Rs. 4000
(d) Rs. 7000
(e) Rs. 7500

Q12. The ratio of the expenditure on food to the savings is
(a) $3: 2$
(b) $2: 1$
(c) $4: 3$
(d) $3: 4$
(e) $2: 3$

Q13. What is the total expenditure of the family for the month?
(a) Rs. 40000
(b) Rs. 48000
(c) Rs. 45000
(d) Rs. 50000
(e) Rs. 55000

Q14. How much more amount is spent on food than on housing?
(a) Rs. 1000
(b) Rs. 3000
(c) Rs. 2000
(d) Rs. 2500
(e) Rs. 3400

Q15. What is the average expenditure on Food, Housing and Others together?
(a) Rs. 12500
(b) Rs. 14000
(c) Rs. 10000
(d) Rs. 12000
(e) Rs. 11500

## Solutions

S1. Ans.(a)
Sol.
Required ratio
Percentage of total student
Percentage of females
For science $=\frac{11}{22}=0.5$
For computer $=\frac{8}{12}=0.66$
For Math $=\frac{13}{23}=0.565$
For English $=\frac{15}{8}=1.875$
For Hindi $=\frac{32}{19}=1.168$
For Sanskrit $=\frac{21}{16}=1.3125$
$\therefore$ Ratio for science is minimum


S2. Ans.(c)
Sol.
Total no. of girls studying
$=\frac{3}{8} \times 48$
=18 thousands
Difference between no. of girls interested in studying computer and that of science.
$=10 \%$ of 18 thousand $=1.8$ thousand

S3. Ans.(a)
Sol.
Boys interested in computer
$=\frac{8}{100} \times 48-\frac{12}{100} \times 18=1.68$ thousand
Boys interested in English
$\frac{15}{100} \times 48-\frac{8}{100} \times 18=5.76$ thousand
Girls interested in Sanskrit
$=\frac{16}{100} \times 18=2.88$ thousand
Girls interested in Math $=\frac{23}{100} \times 18=4.14$ thousands
$\therefore$ Required ratio
$=\frac{5.76+1.68}{2.88+4.14}=\frac{124}{117}$
S4. Ans.(b)
Sol.
Required ratio
$=\frac{21+13}{11+32}=34: 43$
S5. Ans.(a)
Sol.
No. of boys studying Hindi
$=\frac{32}{100} \times 48-\frac{19}{100} \times 18$
$=15.36-3.42$
$=11.94$
No. of boys studying English $=\frac{15}{100} \times 48-\frac{8}{100} \times 18$
$=7.20-1.44$
$=5.76$
$\therefore$ required percentage
$=\frac{4.86}{17.7} \times 100 \simeq 27.457 \% \simeq 27 \%$


S6. Ans.(a)
Sol. Required percentage $=\frac{45}{360} \times 100$
= 12.5\%
S7. Ans.(d)
Sol. Required percentage $=\frac{63-36}{36} \times 100$
= 75\%
S8. Ans.(c)
Sol. Required percentage $=\frac{81-54}{81} \times 100$
$=\frac{100}{3} \%$
S9. Ans.(b)

Sol. Total spending on Hockey and Cricket together $=\frac{144}{360} \times 2=80,00,000$
S10. Ans.(a)
Sol. Required answer
$=\frac{5}{360} \times 1,80,00,000$
$=2,50,000$
S11. Ans.(c)
Sol. Total saving = Rs. 8000
i.e., $60^{\circ}=$ Rs. 8000

So, education $=30^{\circ}=\frac{8000}{2}=$ Rs. 4000
S12. Ans.(b)
Sol. Expenditure on food $=120^{\circ}$
And saving $=60^{\circ}$
So, the ratio = $2: 1$

S13. Ans.(a)
Sol. Family's total saving $=60^{\circ}$
And total expenditure $=300^{\circ}$
So, the value of $300^{\circ}=8000 \times 5=$ Rs. 40000

S14. Ans.(c)
Sol. Expenditure on food $=120^{\circ}$
Expenditure on housing $=105^{\circ}$
Difference $=15^{\circ}$
Saving $=60^{\circ}=$ Rs. 8000
So, $15^{\circ}=\frac{8000}{4}=$ Rs. 2000
S15. Ans.(d)
Sol. Average expenditure on given items $=\frac{1}{3} \times \frac{270}{360} \times \frac{360}{60} \times 8000$
= Rs. 12000

