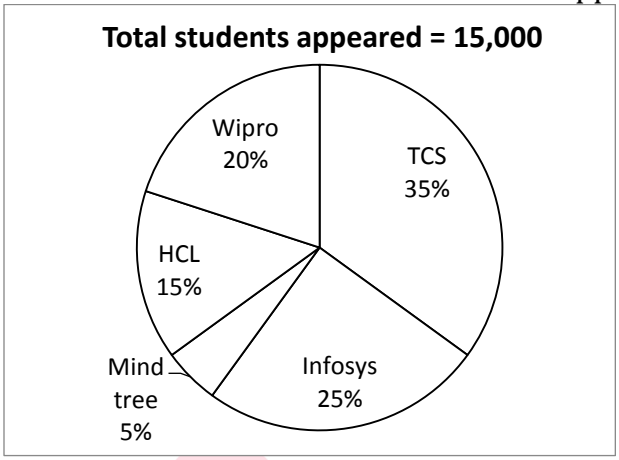
Quiz Date: 26th May 2020

Directions (1-5): Study the data given below and answer the related questions.
Pie-chart shows the distribution of student appearing for walk in interview in 5 companies
Table shows the ratio of male to females appeared in walk in these companies.



Company	male to female ratio
TCS	19: 16
Infosys	7: 8
Mind tree	12: 13
HCL	3: 2
Wipro	7: 3

Q1. Find the ratio of male appeared in TCS to females appeared in HCL and Mind tree together for walk in interview.
(a) 37 : 85
(b) 95 : 43
(c) 53 : 47
(d) 97 : 81
(e) 32 : 43

Q2. If 40% of appeared candidates were selected for job by Infosys in which 500 are males. Then what percent of appeared females were selected in Infosys.
(a) 150%
(b) 125%
(c) 40%
(d) 50%
(e) 75%

Q3. Find the average number of males appeared in walk in in HCL, Wipro, Mind tree and TCS together.
(a) 1665
(b) 1645
(c) 1650
(d) 1680
(e) 1695

Q4. Find the difference of male appeared in HCL walk in to female appeared in Infosys walk in.
(a) 875

(b) 400
(c) 650
(d) 540
(e) 750

Q5. Males appeared in HCL walk in are what percent more/less than female appeared in Wipro walk in.
(a) 50%
(b) 40%
(c) 25%
(d) 60%
(e) 75%

Directions (6 - 10): Find the wrong number in the given number series:

Q6. 1524, 1541, 1576, 1626, 1694, 1779
(a) 1524
(b) 1541
(c) 1576
(d) 1626
(e) 1694

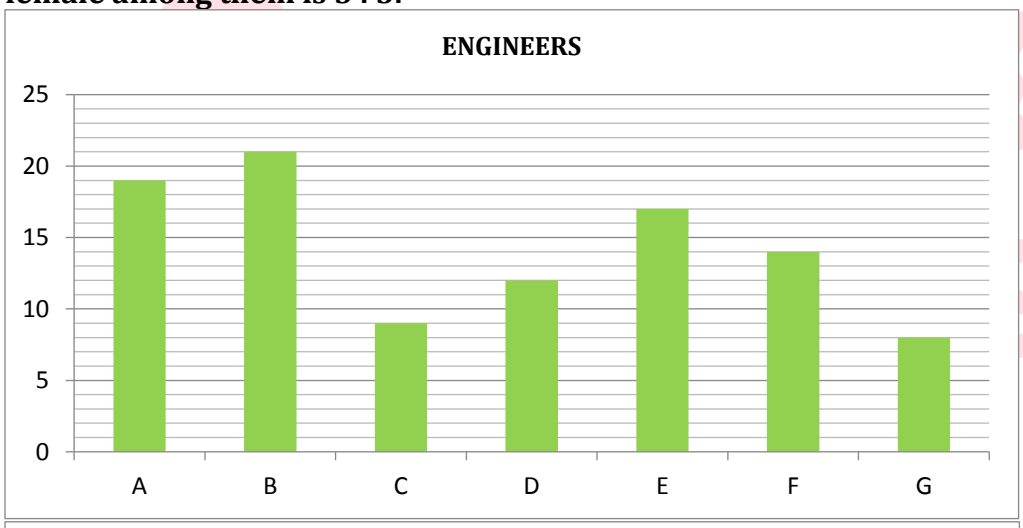
Q7. 169, 184 , 139, 216, 109, 244
(a) 169
(b) 184
(c) 139
(d) 216
(e) 109

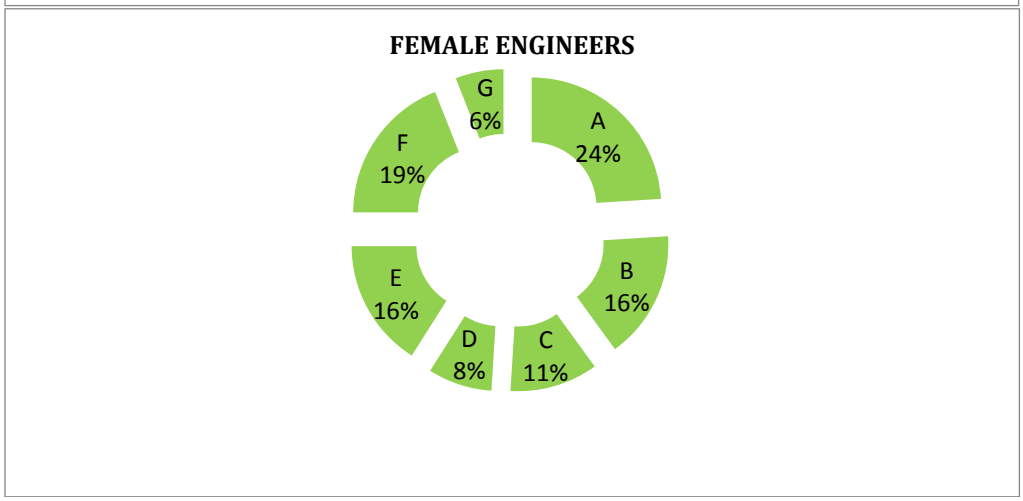
Q8. 50, 32, 18, 10.8, 6.48, 3.888
(a) 32
(b) 18
(c) 10.8
(d) 6.48
(e) 3.888

Q9. 54, 58, 117, 354, 1419, 7098
(a) 54
(b) 58
(c) 117
(d) 1419
(e) 7098

Q10. 0, 4, 18, 54, 100, 180
(a) 0
(b) 18
(c) 54
(d) 4
(e) 100

Directions (11-15): Following graph shows the percentage distribution of number of engineers from seven different cities and the pie-chart shows the percentage distribution of female engineers out of total number of female engineers. Total number of engineers in all the seven cities together is 4800 and the ratio of male to female among them is 5 : 3.





Q11. In how many cities the number of female engineers is more than the average number of female engineers, taking all cities together?
(a) Two
(b) Three
(c) Four
(d) Five
(e) Six

Q12. In which of the following cities is the number of male engineers less than the number of female engineers?
(a) A
(b) B
(c) D
(d) E
(e) F

Q13. In City A, the number of female engineers is what percentage of the number of male engineers?
(a) 64%
(b) 80%
(c) 90%
(d) 96%
(e) 111%

Q14. What is the difference between the average number of male engineers of cities A, B and C together and the average number of male engineers of City E, F and G together?
(a) 88
(b) 96
(c) 100
(d) 108
(e) 112

Q15. The total number of female engineers in City D is what per cent of the total number of male engineers in City B?
(a) 16%

(b) 20%
(c) 24%
(d) 36%
(e) 48%

Solutions

S1. Ans.(b)

Sol. Required ratio = $\frac{\frac{19}{35}\times\frac{35}{100}\times15000}{\frac{2}{5}\times\frac{15}{100}\times15000+\frac{13}{25}\times\frac{5}{100}\times15000}$

$= \frac{95}{43} = 95: 43$

S2. Ans.(d)

Sol. Total no. of candidates selected in Infosys

$= \frac{25}{100} \times \frac{40}{100} \times 15000$

$= 1500$

No. of males selected in Infosys = 500

So,

No. of females selected in Infosys = 1500 – 500 = 1000

Total no. of female appeared in Infosys walk in

$= \frac{8}{15} \times \frac{25}{100} \times 15000$

$= 2000$

So, required percentage = $\frac{1000}{2000} \times 100 = 50\%$

S3. Ans.(a)

Sol. Required average = $\frac{\left(\frac{15}{100}\times\frac{3}{5}\times15000+\frac{20}{100}\times\frac{7}{10}\times15000+\frac{5}{100}\times\frac{12}{25}\times15000+\frac{35}{100}\times\frac{19}{35}\times15000\right)}{4}$

$= \frac{(1350+2100+360+2850)}{4} = 1665$

S4. Ans.(c)

Sol. Male appeared in HCL walk in

$= \frac{15}{100} \times \frac{3}{5} \times 15000$

$= 1350$

Females appeared in Infosys walk in

$= \frac{25}{100} \times \frac{8}{15} \times 15000$

$= 2000$

Required difference = 2000 – 1350 = 650

S5. Ans.(a)

Sol. Males appeared in HCL walk in

$= \frac{15}{100} \times \frac{3}{5} \times 15000$

= 1350
Female appeared in Wipro Walk in
$= \frac{3}{10} \times \frac{20}{100} \times 15000$
= 900
Required percentage = $\frac{(1350-900)}{900} \times 100 = 50\%$

S6. Ans.(c)
Sol.
1524 + 17 × 1 = 1541
1541 + 17 × 2 = 1575, not 1576
1575 + 17 × 3 = 1626
1626 + 17 × 4 = 1694

S7. Ans.(d)
Sol.
169 + (15 × 1) = 184
184 – (15 × 3) = 139
139 + (15 × 5) = 214, not 216
214 – (15 × 7) = 109

S8. Ans.(a)
Sol.
50 × 0.6 = 30
30 × 0.6 = 18, not 32 × 0.6
18×0.6 = 10.8
10.8× 0.6 = 6.48
6.48× 0.6 = 3.888

S9. Ans.(b)
Sol.

$54 \times 1 + 3 = 57$, not 58
$57 \times 2 + 3 = 117$
$117 \times 3 + 3 = 354$
$354 \times 4 + 3 = 1419$
$1419 \times 5 + 3 = 7098$

S10. Ans.(c)
Sol.
$1^3 - 1^2 = 0$
$2^3 - 2^2 = 4$
$3^3 - 3^2 = 18$
$4^3 - 4^2 = 48$, not 54
$5^3 - 5^2 = 100$
$6^3 - 6^2 = 180$

S11. Ans.(c)
Sol.
Total males$=\frac{5}{8} \times 4800 = 3000$
Total females $= \frac{3}{8} \times 4800 = 1800$
Average of female engineers $= \frac{1800}{7} = 257$ (approx)
In city A, female engineers =24% of 1800=432
n city 'B' =288
C=198
D=144
E=288
F=342
G=108
There are four cities in which the number of female engineers is more than the average number of female engineers in all the cities.
These cities are A, B, E and F.

S12. Ans.(e)
Sol.
Total engineers in F$= 4800 \times \frac{14}{100} = 672$
Female engineers in F$= 1800 \times \frac{19}{100} = 342$
$\therefore$ Male engineers$= 672 - 342 = 330$

S13. Ans.(c)
Sol.
Number of engineers in city A $= \frac{19}{100} \times 4800 = 912$

Female engineers (A) $= \frac{24}{100} \times 1800 = 432$
Male engineers (A) $= 912 - 432 = 480$
Required % $= \frac{432}{480} \times 100 = 90\%$

S14. Ans.(c)
Sol.
Number of male engineers in City A=912-432=480
Similarly
Number of male engineers in city B$= 21 \times \frac{4800}{100} - \frac{16}{100} \times 1800 = 720$
Number of male engineers in city C$= 432 - 198 = 234$
Average number of male of (A, B, C)$= \frac{480+720+234}{3} = 478$
Average number of male of (E, F, G)$= \frac{528+330+276}{3} = 378$
Required Difference $= 478 - 378 = 100$

S15. Ans.(b)
Sol.
D(female) $= \frac{8}{100} \times 1800 = 144$
B (total) $= \frac{21}{100} \times 4800 = 1008$
B (female) $= \frac{16}{100} \times 1800 = 288$
B (male)$= 720$
Required %$= \frac{144}{720} \times 100 = 20\%$