

TCS Mock 3**SOLUTIONS****Section A: Verbal Reasoning**

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|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 1. Ans. (a) | 2. Ans. (b) | 3. Ans. (a) | 4. Ans. (b) | 5. Ans. (a) | 6. Ans. (c) | 7. Ans. (c) |
| 8. Ans. (a) | 9. Ans. (c) | 10. Ans. (a) | 11. Ans. (e) | 12. Ans. (e) | 13. Ans. (b) | 14. Ans. (a) |
| 15. Ans. (a) | 16. Ans. (b) | 17. Ans. (a) | 18. Ans. (b) | 19. Ans. (c) | 20. Ans. (d) | 21. Ans. (a) |
| 22. Ans. (a) | 23. Ans. (d) | 24. Ans. (c) | 25. Ans. (a) | 26. Ans. (e) | 27. Ans. (c) | 28. Ans. (d) |
| 29. Ans. (d) | 30. Ans. (b) | 31. Ans. (c) | 32. Ans. (a) | 33. Ans. (d) | 34. Ans. (b) | 35. Ans. (c) |
| 36. Ans. (c) | 37. Ans. (a) | | | | | |

Section B: Quantitative Aptitude

38. **Ans. (d) Solution:** In the 1st day Anand does $1/7$ th of total work. Similarly, Bithu does $1/8$ th of total work in the 2nd day hence at the end of 3 days, work done = $1/7+1/8+1/6=73/168$. Remaining work = $(168-73)/168 = 95/168$. After 6 days of work, remaining work is = $(95-73)/168 = 22/168$ and hence Anand completes the work on 7th day.
39. **Ans. (d) Solution:** A man and a woman in 1 day work = $1/14 + 1/16 = 15/112$. So, the boy does in a single day = $(1/4 - 15/112) = 13/112$. So, the boy alone does complete work in = $112/13 = 8.6$ days.
40. **Ans. (b) Solution:** $h \propto k \cdot t^2$ (where, 'k' is a constant). i.e., $k = h/t^2 = 64/2^2 = 16$. So, in next case, $h = 16 \times 6^2 = 576$.
41. **Ans. (b) Solution:** A shows 11:57, B shows 12:03, C shows 12:02, and D shows 11:06 therefore, maximum time is for B.
42. **Ans. (a) Solution:** Because each had at least 1 shot done so $10 + 1 = 11$.
43. **Ans. (c) Solution:** $A-B = 3$; $B-C = 5$; $A-C = 8$. So sum of differences = $8+3+5 = 16$ kgs.
44. **Ans. (c) Solution:** $(8x + 12) / (9x - 19) = 2 / 1$. i.e., $x = 5$. So, the larger number is = $9 \times 5 = 45$.
45. **Ans. (a) Solution:** For every 5 in unit place one zero is added. So between 1 to 100 there are 10 no.s like 5, 15, 25, ..., 95 which has 5 in unit place. Similarly for every no divisible by 10 one zero is added in the answer so between 1 to 100 11 zeros are added for 25, 50, 75 3 extra zeros are added so total no of zeros are $10+11+3=24$.
46. **Ans. (d) Solution:** C.P. of 1 ltr. Milk = Rs.1. S.P. of 1 ltr. of mixture = Rs. 1. Gain = $50/3$ %. So, C.P. of 1 ltr. mixture = $(100 \times 3 / 350 \times 1) = Rs. 6/7$. Ratio of water and milk = $1/7 : 6/7 = 1 : 6$.
47. **Ans. (a) Solution:** In 1hr they can empty $(1/4+1/12) = 1/3$. The total time required is 3hrs.
48. **Ans. (a) Solution:** $x + y = 150$. i.e., $y = (150 - x)$. So, $2x + (150 - x) = 264$. $x = 114$.
49. **Ans. (d) Solution:** $Y = 5X$. and $X + Y = 42$. $\Rightarrow X = 264 - 150 = 114$.
50. **Ans. (b) Solution:** 30%.
51. **Ans. (c) Solution:** incomes:3:4; expenditures:4:5; $3x-4y=1/4(3x)$ i.e., $y=9x/16$. So, $(3x-4(9x/16))/(4x-5(9x/16)) = 12/19$. i.e., 12:19.
52. **Ans. (d) Solution:** A copies 5 pages in 1 hr. A and B type = 7 pages in 1 hr. So, B types = 2 pages in 1 hr. B types 26 pages in = $26/2 = 13$ hr.
53. **Ans. (a) Solution:** 3 ft 7.5 inches.
54. **Ans. (a) Solution:** $x + x+6 = rs 68$; $2x + 6 = 68$ i.e., $x = 31 + 6 = 31+6=37$ is lost in second race. Then my friend lost $37 + 4 = Rs.41$
55. **Ans. (b) Solution:** The clock normally has 12 hr. three parts x,y,z; $x+y+z=12$. $x=y+z$ i.e., $2x=12$ so, $x=6$. so the largest part is 6 hrs.
56. **Ans. (b) Solution:** $1^* 3 = 3$, $1^* 1/3 = 1/3$. So he has to get $1/3$. This is the exact answer.
57. **Ans. (d) Solution:** For 4/5 or 12/15 full tank it travels 12 miles hence (by unitary method) for $1/3$ or 5/15 full tank it would go = 5 miles.
58. **Ans. (a) Solution:** Number of ways of drawing 2 balls out of $(6+4) = 10C2 = (10 \times 9)/(2 \times 1) = 45$. Number of ways of drawing (2 balls out of 6) or (2 balls out of 4) = $6C2 + 4C2 = 15 + 6 = 21$. $P(E) = 21/45 = 7/15$.
59. **Ans. (d) Solution:** Loss in 1st item = $20/100 * 1250 = 250$. If 25% profit is to be achieved in overall, 3125 'ld be S.P. So, S.P. of the 2nd item = $(3125 - 1000) = 2125$.
60. **Ans. (b) Solution:** $x - y = 1/7(x + y)$. $\Rightarrow 6x = 8y$. i.e., $x : y = 4 : 3$.
61. **Ans. (c) Solution:** $12 - 7.15 = 4.45 + 2.47 = 7.32$ hours of total journey.
62. **Ans. (a) Solution:** Percentage of money spent on Tennis = $[(45/360) \times 100] \% = 12 \frac{1}{2}\%$.
63. **Ans. (d) Solution:** Let the total spending on sports be Rs.x. Then, amount spent on Golf = Rs. $[(36/360) \times x] = Rs. (x/10)$. Amount spent on Hockey = Rs. $[(63/360) \times x] = Rs. (7/40x)$. Difference = Rs. $[(7/40) x - (x/10)] = Rs. 3x/40$. So, required percentage = $[(3x/40) \div (x/10)] \times 100] \% = 75\%$.
64. **Ans. (c) Solution:** Let the total spending on sports be Rs.x. Then, amount spent on Cricket = Rs. $[(81/360) \times x] = Rs. (9/40)x$. Amount spent on Football = Rs. $[(54/360) \times x] = Rs. (3/20)x$. Difference = Rs. $[(9/40)x - (3/20)x] = Rs. (3/40)x$. So, , required percentage = $[(3x/40) \div (9x/40)] \times 100] \% = 33 \frac{1}{3}\%$.
65. **Ans. (b) Solution:** Amount spent on Cricket and Hockey together = Rs. $[(81+63)/360] \times 2$ crores = Rs. 0.8 crores = Rs. 8000000.
66. **Ans. (a) Solution:** Amount spent on Basketball exceeds that on Tennis by: Rs. $[(54-45)/360] \times 18000000 = Rs. 2500000$.
67. **Ans. (d) Solution:** The percentage increase from 1995 to 2000 for various products is:
Lipstick = $[(48.17 - 20.15)/20.15] \times 100] \% = 139.06\%$; Nail enamels = $[(37.76 - 5.93)/5.93] \times 100] \% = 536.76\%$; Talcum powders = $[(29.14 - 14.97)/14.97] \times 100] \% = 94.66$; Shampoo = $[(12.21 - 7.88)/7.88] \times 100] \% = 54.95\% = 55\%$; Conditioners = $[(10.19 - 5.01)/5.01] \times 100] \% = 103.39$.
68. **Ans. (d) Solution:** As calculated in the Solution of Q 11, the minimum rate of increase in sales from 1995 to 2000 is in the case of Shampoos.
69. **Ans. (c) Solution:** Required percentage = $[(48.17 - 37.76)/37.76] \times 100] \% = 27.57\% = 28\%$.
70. **Ans. (b) Solution:** Required percentage = $[(7.88 - 5.01)/7.88] \times 100] \% = 36.42\% = 36\%$.
71. **Ans. (b) Solution:** Required ratio = $37.76/14.97 = 2.5 = 5:2$.

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Section C: Analytical Reasoning

Solutions for questions 72-75:

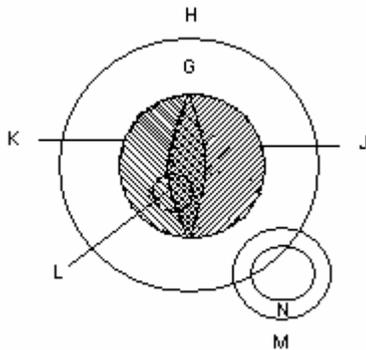
The games played by all the eight players are shown here.

| Players | G | H | J | K | L | M | N | O |
|---------|----------|----------|----------|------------|----------|----------|------------|----------|
| Games | Baseball | Baseball | Baseball | Baseball | Baseball | Baseball | Baseball | Baseball |
| | | Football | | | | Football | | Football |
| | | | | basketball | | | basketball | |

- 72. **Ans. (a) Solution:** Since no athlete in two sports is allowed to sit next to another two-sport athlete so from the above chart the combination H G K L is found to be feasible.
- 73. **Ans. (d) Solution:** M may sit next to either G, J, or L. Rest are two sports athlete.
- 74. **Ans. (b) Solution:** The only ones that may sit next to N are G, J, L.
- 75. **Ans. (e) Solution:** Since H, M and N all three are two-sport athlete and J and L not being that, so K can sit between J and L as evident from the chart.

Solutions for questions 76-79:

As per the statements given in the argument the chart looks like this



76. E 77. E 78. C 79. D

Solutions for questions 80-83:



The answers can be given based on the above diagram but certain things are still uncertain. We don't know the host and the hostess and George is seated between Belinda and Carol but we don't know out of them who is occupying the hostess's chair.

- 80. **Ans. (c) Solution:** The slot for eighth person, Eric is the host's chair and he is seated to Diane's right.
- 81. **Ans. (a) Solution:** As per diagram.
- 82. **Ans. (d) Solution:** By inspection. All the others are next to at least one person of the same sex, and Belinda and Carol could be sitting next to Helga.
- 83. **Ans. (a) Solution:** If George shifts four places to the left, then he exchanges seat with Diane. So condition I is applicable others are ruled out.

Fall seven times, stand up eight. – Japanese Proverb.

