Q1. In an assembly election, a candidate got 60% of the total valid votes. 2% of the total votes were declared invalid. If the total number of voters is 1,50,000, then find the number of valid votes polled in favour of that candidate. [Percentage, Level 2, Infosys]
1) 90,000
2) 78,000
3) 86,400
4) 88,200
Ans: 4
Solution
Total votes = 150000
Invalid votes = 2% of the total votes
The winner got = 60% of the valid votes
Total valid votes = 98% of 150000 = 147200
Votes polled in favour of the candidate = 60% of 147200 = 88200

Q2: The weight of an iron bucket increases by 33.33% when filled with water to 50% of its capacity. Which of these may be 50% of the weight of the bucket when it is filled with water (assume the weight of bucket and its capacity in kg to be integers)? [Percentage, TCS, Level 3]
a. 7 Kg
b. 6 Kg
c. 5 Kg
d. 8 Kg
Ans: c
Soln: Here weight bucket=x and water when filled 50% its weight=y
so x + y =1.33 x
so x=3y
now in second case u need to find x + 2y
Now if u take 50% weight = 5
then full weight 10
bucket weight=6 so as per 33.33 % condition water weight 2(50% water weight) (because x=3y)
so finally bucket weight =6 + water weight 4 =10
50% weight = 5 kg

Q3. A can do a piece of work in 10 days, while A and B together can complete it in 5/2 days. How long will B alone take to complete the work? [Time and Work, Level 2, Capegemini]
1) 3/10 days
2) 10/3 days
3) 3 days
4) 4 days
Ans: 2
1 days work of B = 2/5 - 1/10 = 3/10
So, B will take 10/3 days.

Q4. Anuj's efficiency is 150 percent of Vinod's efficiency. If Anuj can complete a work in 20 days, then how many days will they together take to complete the same work? [Time and Work, Level 2, Infosys]
1) 6 days
2) 9 days
3) 15 days
4) 12 days
Ans: 4
Let Vinod's efficiency be x
Let the total time taken by them to complete the work = t days
Anuj's efficiency = (3/2)x
Number of days taken by Anuj to complete the work = 20 days
Total work = Efficiency × Time
Now, 20(3x/2) = t(3/x + x)
⇒ t = 12 days

Q5. 4 men and 7 women can do work in 8 days. 7 men and 4 women can do the same work in 5 days. Find the number of days in which 8 women can finish the work. [Time and Work, Level 3, TCS]
1) 60 days
2) 55 days
3) 40 days
4) 45 days
Ans: 2
Use: M1D1 = M2D2

Q6. A man earns a profit of 20% by selling a calculator for a certain price. If he sells that calculator at double the price, then what will be the profit percentage? [Profit and Loss, Level 2, Infosys]
1) 140%
2) 160%
3) 60%
4) 120%
Ans: 1

Solution
Let the Cost price be 100
A man gains 20% by selling an article.
Then, selling price = 120
New selling price = 240
New Profit = 240 -100 = 140
Profit percentage = 140%

Q7. The marked price of an article is 40% more than its cost price. If a 20% discount is given on the marked price, then what will be the profit percentage? [Profit and Loss, Level 2, TCS]
1) 15%
2) 12%

3) 10%
4) 8%
Ans: 2
Solution
Let the Cost price be 100
Marked price = 140% of CP = 140
Then, selling price = 80% of 140 = 112
Profit = 112 -100 = 12
Profit percentage = 12%

Q8. A sum becomes 1.96 times itself in 2 years when invested at compound interest (compounding annually). What is the annual rate of interest? [SI and CI, Wipro, Level 2]
1) 20 percent
2) 25 percent
3) 40 percent
4) 30 percent
Ans: 3
1.96P = P(1+ r/100)^2

Q9. What is the compound interest for 1 year on a sum of Rs. 18000 at the annual rate of 20% per annum compounding half-yearly? [SI and CI, Wipro, Level 2]
1) Rs. 3780
2) Rs. 2450
3) Rs. 4500
4) Rs. 3650
Ans: 1
Amount = 18000(1 + 10/100)^2
CI = Amount – 18000

Q10. What is the value of x if 10/3 : x :: 5/2 : 5/4 ? [Ratio and Proportion, Level 1, Capegemini]
1) 2
2) 8
3) 5/3
4) 10/3
Ans: 3
10/3x = 20/10
So, x = 5/3

Q11. If 6 men can lay 8 bricks in one day, then how many men are required to lay 60 bricks in the same time? [Ratio and Proportion, Level 2, Capegemini, Wipro]
(1) 45 men
(2) 40 men
(3) 60 men
(4) 50 men
Ans: 2
Sol.

Since the time is same so to do more work we need more persons. Hence this is the problem of direct proportion,

i.e. $\frac{M_1}{B_1} = \frac{M_2}{B_2} \Rightarrow M_2 = \frac{6 \times 60}{8} = 45$ men

Q12. What will be the average of the first 8 positive even numbers divisible by 9?
1) 45
2) 72
3) 81
4) 63 [Average, Level 2, Infosys]
Ans:3
The sum of the numbers = 9 × 2(1 + 2 + 3 + 4 + 5 + 6 + 7 + 8) = 648
Average = 648/1 = 81

Q13. x, y, and z are 3 values, such that x + y = 12, y + z = 17 and z + x = 19. What is the average of x, y, and z? [Average, Level 3, TCS]
1) 10
2) 8
3) 6
4) 4
Ans: 2

Key Concepts
By using the formula: Average of x, y, and z = (x+y+z)/3

Q14. There are two mixtures of alcohol and water, the quantity of alcohol in them being 20% and 80% of the mixture. If 2 litres of the first are mixed with three litres of the second, what will be the ratio of alcohol to water in the new mixture? [Mixture and Alligation, Level 2, Wipro]
1) 11:12
2) 11:9
3) 14:11
4) 19:11
Ans: 3
The percentage of alcohol in the new mixture would be:
(2*20+3*80)/5
=280/5
=56%
The ratio of alcohol to water in the new mixture would be 56:44=14:11

Q15. Find the value of W. (Infosys)
WAIT + ALL = GIFTS
A) 7
B) 8
C) 9
D) None of these

Answer – C
Hint – use hit and trail method and crypt concept