Q1. In a university, 65% of the students passed an English exam, and 350 students failed. How many students appeared for the exam? (Cognizant)

A. 800

B. 900

C. 1000

D. 1200

Ans: C

Hint: If 65% passed, then 35% failed. Use this percentage to find the total number of students.

Q2. In a charity drive, three teams collected donations of Rs. 3500, Rs. 5500, and Rs. 11000 respectively. What percentage of the total donations did the team with the highest collection get? (Accenture)

A. 50%

B. 55%

C. 60%

D. 65%

Ans: B

Hint: First, find the total donations. Then, identify the highest collection and calculate its percentage of the total.

Q3. If the price of cooking gas is increased by 20%, by how much percent must a family reduce its consumption to maintain the same expenditure? (Accenture)

A. 16.67%

B. 18%

C. 20%

D. 25%

Ans: A

Hint: Use the formula: Percentage reduction = [Increase percentage/(100+Increasepercentage)]×100.

Q4. The price of 9 shirts is 25% more than the price of 5 pairs of socks. If the price of 2 pairs of socks is Rs. 400, then what is the price of 9 shirts? (Cognizant)

A. Rs. 1150

B. Rs. 1250

C. Rs. 1375

D. Rs. 1500

Ans: B

Hint: Calculate the price of 5 pairs of socks first, then add 25% to that value.

Q5. Find the single equivalent discount of 20% and 15%. (Accenture)

A. 32%

B. 33%

C. 34%

D. 35%

Ans: A

Hint: Use the formula for successive discounts:

Q6. A trader sells an item at a loss of 10%. Had he sold the item for Rs. 40 more, he would have gained 10%. To earn a profit of 20%, what should be the selling price of the item? (Tech Mahindra)

A. Rs. 200

B. Rs. 220

C. Rs. 240

D. Rs. 260

Ans: C

Hint: The difference of Rs. 40 represents the difference between a 10% loss and a 10% gain relative to the cost price (CP). So, 20% of CP = 40.

Q7. If p : q = 5 : 6 and q : r = 3 : 4, then what is the value of 3p : 2q : 4r? (Infosys)

A. 15 : 12 : 16

B. 15 : 24 : 32

C. 5 : 4 : 8

D. 25 : 36 : 48

Ans: B

Hint: First, find the combined ratio p : q : r by making the 'q' component common. Then, substitute these relative values into the expression 3p:2q:4r.

Q8. Two numbers are in the ratio 3 : 5. If both numbers are increased by 20, then their ratio becomes 5 : 7. What is the difference between the two numbers? (Tech Mahindra)

A. 10

B. 20

C. 30

D. 40

Ans: B

Hint: Let the numbers be 3x and 5x. Set up the proportion: (5x+20)/(3x+20)=7/5.

Q9. What is the remainder when 13^{2025} is divided by 10? (TCS)

A. 1

B. 3

C. 7

D. 9

Ans: B

Hint: Find the cyclicity of the unit digit of powers of 3 and apply it to the exponent.

Q10. What is the unit digit of ($2^{55} \times 4^{66} \times 8^{77}$)? (Infosys)

A. 2

B. 4

C. 6

D. 8

Ans: A

Hint: Find the unit digit of each term individually and then multiply them to find the final unit digit.

Q11. The GCF of two numbers is 12 and their LCM is 360. If one of the numbers is 60, what is the other number? (Accenture)

A. 72

B. 84

C. 96

D. 108

Ans: A

Hint: Use the formula: Product of two numbers = GCF × LCM.

Q12. What is the least number which when divided by 18, 24, and 30 leaves a remainder of 7 in each case? (Cognizant)

A. 367

B. 377

C. 387

D. 397

Ans: C

Hint: Find the LCM of 18, 24, and 30, and then add the common remainder.

Q13. Find the number of zeros at the end of 150! (Accenture)

A. 30

B. 37

C. 39

D. 42

Ans: B

Hint: The number of zeros is determined by the number of times 5 is a factor in the prime factorization of the factorial. Divide 150 by 5, then the quotient by 5, and so on, then sum the quotients.

Q14. How many factors does the number 480 have? (TCS)

A. 16

B. 20

C. 24

D. 28

Ans: C

Hint: Find the prime factorization of 480. If the prime factorization is p

Q15. When a number is divided by 560, the remainder is 45. What will be the remainder when the same number is divided by 14? (Tech Mahindra)

A. 1

B. 3

C. 5

D. 7

Ans: B

Hint: Let the number be 560k+45. Then, divide 45 by 14 to find the new remainder.