

- 1) Which number should be subtracted from 876905. So that it can be divisible by 8?
 - A. 1
 - B. 2
 - C. 3
 - D. 4
- 2) The number $456*85$ is completely divisible by 3. Smallest whole digit number in place of * can be?
 - A. 0
 - B. 1
 - C. 2
 - D. 3
- 3) The number 673 and 865 is divisible by which of the following leaving a remainder 1 ?
 - A. 1
 - B. 2
 - C. 3
 - D. 4
 - E. 2, 3 and 4
- 4) A three digit number $4A3$ is added to another three digit number 984 which result in four digit number $13B7$. This four digit number is divisible by 11. What is the value of $A+B$?
 - A. 8
 - B. 9
 - C. 10
 - D. 11
- 5) What are the largest four digit and the smallest three digit numbers divisible by 6, 15, 21 and 24?
 - A. 9235 and 420
 - B. 9980 and 840
 - C. 9240 and 840
 - D. 9999 and 999
- 6) If $abc4d$ is divisible by 4, what can not be the value of d ?
 - A. 0
 - B. 4
 - C. 8
 - D. 2

- 7) The sum of the digits of a three digit number is subtracted from the number. The resulting number is divisible by
- A. 6
 - B. 9
 - C. Both 6 and 9
 - D. All 3, 6 and 9
- 8) Find the place value of 2 and 7 for the following numbers:
- i. 29975
 - ii. 8627
 - iii. 28467
 - iv. 720000
- 9) Find the sum and product of the place value and face value of 6 in the number 86245.
- A. 6006 & 36000
 - B. 6012 & 3600
 - C. 606 & 36000
 - D. 6006 & 360000
- 10) The difference between the local value and the face value of 7 in the numeral 32675149 is
- A. 69993
 - B. 6993
 - C. 0
 - D. None of these
- 11) What least number must be added to 2010 to obtain a number which is completely divisible by 19?
- A. 5
 - B. 4
 - C. 3
 - D. 2
- 12) On dividing 12401 by a certain number, we get 76 as quotient and 13 as remainder. What is the divisor?
- A. 16
 - B. 163
 - C. 169
 - D. 136

- 13) A number when divided by the sum of 625 and 515 gives a quotient that is 5 times the difference between 625 and 515 and remainder is zero. What is the number?
- A. 632500
 - B. 627000
 - C. 617500
 - D. 642000
- 14) If the difference of two numbers is 8 and the difference of their squares is 160, then the numbers are
- A. 18,10
 - B. 8,16
 - C. 6,14
 - D. None of these
- 15) For the smallest number that should be multiplied with 54000 to make it a perfect cube?
- A. 4
 - B. 27
 - C. 5
 - D. 3
- 16) By what number should be 86700 divided to make it perfect square?
- A. 2
 - B. 6
 - C. 4
 - D. 3
- 17) Find the LCM of $2^2 \times 3^3 \times 5 \times 7^2$, $2^3 \times 3^2 \times 5^2 \times 7^4$, $2 \times 3 \times 5^3 \times 7 \times 11$
- A. $2^2 \times 3^2 \times 5^2 \times 7^3 \times 11$
 - B. $2^3 \times 3^3 \times 5^3 \times 7^4 \times 11$
 - C. $2^4 \times 3 \times 5^2 \times 7^2 \times 11^2$
 - D. $2^3 \times 3^3 \times 5^3 \times 7^4 \times 11^2$
- 18) Find the HCF of $2^3 \times 3^2 \times 5 \times 7^4$, $2^2 \times 3^5 \times 5^2 \times 7^3$, $2^3 \times 5^3 \times 7^2$
- A. 640
 - B. 980
 - C. 890
 - D. 460

19) The LCM of $2^3 \times 3^2 \times 5 \times 11$, $2^4 \times 3^4 \times 5^2 \times 7$ and $2^5 \times 3^3 \times 5^3 \times 7^2 \times 11$ is

- A. $2^3 \times 3^2 \times 5$
- B. $2^5 \times 3^4 \times 5^3 \times 7^2 \times 11$
- C. $2^5 \times 3^4 \times 5^3$
- D. $2^3 \times 3^2 \times 5 \times 7 \times 11$

20) The HCF of $\frac{9}{10}$, $\frac{12}{25}$, $\frac{18}{35}$ and $\frac{21}{40}$

- A. $\frac{3}{5}$
- B. $\frac{3}{1400}$
- C. $\frac{252}{5}$
- D. $\frac{63}{700}$

21) The LCM of $\frac{2}{3}$, $\frac{3}{5}$, $\frac{4}{7}$ and $\frac{9}{13}$ is

- A. $\frac{1}{36}$
- B. 36
- C. $\frac{1}{1365}$
- D. $\frac{12}{455}$

22) Find the HCF and LCM of $\frac{2}{3}$, $\frac{8}{9}$, $\frac{16}{81}$ and $\frac{10}{27}$

- A. $\frac{80}{3}$ and $\frac{2}{81}$
- B. $\frac{2}{81}$ and $\frac{80}{3}$
- C. $\frac{2}{80}$ and $\frac{2}{81}$
- D. None of these

23) The greatest possible length which can be used to measure exactly the lengths 7m, 3m 85cm, 12m 95cm is:

- A. 15cm
- B. 35cm
- C. 42cm
- D. 25cm

- 24) Three different containers contain 496 litres, 403 litres and 713 litres of mixtures of milk and water respectively. What biggest measure can measure all the different quantities exactly?
- 7 litres
 - 31 litres
 - 41 litres
 - None of these
- 25) Six bells commence tolling together and toll at intervals of 2, 4, 6, 8, 10 and 12 seconds respectively. In 30 minutes, how many times do they toll together?
- 4
 - 16
 - 15
 - 10
- 26) A, B and C start at the same time in the same direction to run around a circular stadium. A complete a round in 252 seconds, B in 308 seconds and C in 198 seconds, all starting at the same point. After what time will they meet again at the starting point?
- 26m. 18s
 - 46m. 12s
 - 45m
 - 42m 36s
- 27) The smallest fraction, which each of $\frac{6}{7}$, $\frac{5}{14}$, $\frac{10}{21}$ will divide exactly, is:
- $\frac{9}{13}$
 - $\frac{30}{7}$
 - $\frac{30}{98}$
 - $\frac{95}{123}$
- 28) Find square root of the following numbers:
- 2704
 - 2916
 - 5929
 - 8100
 - 3969
 - 7225
 - 6724

- 29) Find the cube root of the following numbers:
- A. 19683
 - B. 42875
 - C. 97336
 - D. 753571
 - E. 830584
 - F. 456533
 - G. 300763
- 30) Find the perfect square of the following numbers:
- A. 24
 - B. 42
 - C. 33
 - D. 56
 - E. 78
 - F. 96
- 31) Find the unit place of 1768^{1293}
- 32) Find the unit digit of $432^{412} \times 499^{431}$
- 33) Find the unit digit of $[(25^{43} \times 56^{42}) + 456^{25} + 23^{42} + 76^{23}]$
- 34) Find the unit digit in $1! + 2! + 3! + 4! + \dots + 50!$
- 35) If $X = 164^{169} + 333^{337} - 727^{726}$, then what is the unit digit of X?
- 36) If a number is divided by 527, the remainder is 42. What will be the remainder if it is divided by 17?
- 37) A number when divided by 114, leaves remainder 21. If the same number is divided by 19, then the remainder will be....
- 38) A number, when divided by 136, leaves remainder 36. If the same number is divided by 17, the remainder will be.....
- 39) What will be the remainder 17^{21} is divided by 16?

- 40) What will be the remainder 29^{75} is divided by 30?
- 41) What will be the remainder 25^{24} is divided by 26?
- 42) What will be the remainder when 29^{36} is divided by 28?
- 43) What will be the remainder when $(16^{27} + 37)$ is divided by 17?
- 44) Find the remainder when $84 + 98 + 197 + 240 + 140$ is divide
by 32
- 45) What is the remainder when $123 \times 124 \times 125$ is divided by 9