1. Which one of the following is not a prime number?

A) 31 B) 61 C) 71 D) 91

2. (112 x 54) = ?

A) 67000 B) 70000 C) 76500 D) 77200

3. It is being given that (232 + 1) is completely divisible by a whole number. Which of the following numbers is completely divisible by this number?

A) (216 + 1) B) (216 - 1) C) (7 x 223) D) (296 + 1)

4. What least number must be added to 1056, so that the sum is completely divisible by 23 ?

A) 2 B) 3 C) 18 D) 21 E) None of these

5. 1397 x 1397 = ?

A) 1951609 B) 1981709 C) 18362619 D) 2031719 E) None of these

6. How many of the following numbers are divisible by 132 ?  
264, 396, 462, 792, 968, 2178, 5184, 6336

A) 4 B) 5 C) 6 D) 7

7. (935421 x 625) = ?

A) 575648125 B) 584638125 C) 584649125 D) 585628125

8. The largest 4 digit number exactly divisible by 88 is:

A) 9944 B) 9768 C) 9988 D) 8888 E) None of these

9. Which of the following is a prime number ?

A) 33 B) 81 C) 93 D) 97

10. What is the unit digit in {(6374)1793 x (625)317 x (341491)}?

A) 0 B) 2 C) 3 D) 5

11. 5358 x 51 = ?

A) 273258 B) 273268 C) 273348 D) 273358

12. The sum of first five prime numbers is:

A) 11 B) 18 C) 26 D) 28

13. The difference of two numbers is 1365. On dividing the larger number by the smaller, we get 6 as quotient and the 15 as remainder. What is the smaller number ?

A) 240 B) 270 C) 295 D) 360

14. (12)3 x 64 ÷ 432 = ?

A) 5184 B) 5060 C) 5148 D) 5084 E) None of these

15. 72519 x 9999 = ?

A) 725117481 B) 674217481 C) 685126481 D) 696217481 E) None of these

16. If the number 517\*324 is completely divisible by 3, then the smallest whole number in the place of \* will be:

A) 0 B) 1 C) 2 D) None of these

17. The smallest 3 digit prime number is:

A) 101 B) 103 C) 109 D) 113

18. Which one of the following numbers is exactly divisible by 11?

A) 235641 B) 245642 C) 315624 D) 415624

19. (?) - 19657 - 33994 = 9999

A) 63650 B) 53760 C) 59640 D) 61560 E) None of these

20. The sum of first 45 natural numbers is:

A) 1035 B) 1280 C) 2070 D) 2140

21. Which of the following number is divisible by 24 ?

A) 35718 B) 63810 C) 537804 D) 3125736

22. 753 x 753 + 247 x 247 - 753 x 247  
= ?  
  
  
753 x 753 x 753 + 247 x 247 x 247

A) 1  
  
  
1000 B) 1  
  
  
506 C) 253  
  
  
500 D) None of these

23. (?) + 3699 + 1985 - 2047 = 31111

A) 34748 B) 27474 C) 30154 D) 27574 E) None of these

24. If the number 481 \* 673 is completely divisible by 9, then the smallest whole number in place of \* will be:

A) 2 B) 5 C) 6 D) 7 E) None of these

25. The difference between the local value and the face value of 7 in the numeral 32675149 is

A) 75142 B) 64851 C) 5149 D) 69993 E) None of these

26. The difference between a positive proper fraction and its reciprocal is 9/20. The fraction is:

A) 3  
  
  
5 B) 3  
  
  
10 C) 4  
  
  
5 D) 4  
  
  
3

27. On dividing a number by 56, we get 29 as remainder. On dividing the same number by 8, what will be the remainder ?

A) 4 B) 5 C) 6 D) 7

28. If n is a natural number, then (6n2 + 6n) is always divisible by:

A) 6 only B) 6 and 12 both C) 12 only D) by 18 only

29. 107 x 107 + 93 x 93 = ?

A) 19578 B) 19418 C) 20098 D) 21908 E) None of these

30. What will be remainder when (6767 + 67) is divided by 68 ?

A) 1 B) 63 C) 66 D) 67

31. On dividing a number by 5, we get 3 as remainder. What will the remainder when the square of the this number is divided by 5 ?

A) 0 B) 1 C) 2 D) 4

32. How many 3-digit numbers are completely divisible 6 ?

A) 149 B) 150 C) 151 D) 166

33. How many natural numbers are there between 23 and 100 which are exactly divisible by 6 ?

A) 8 B) 11 C) 12 D) 13 E) None of these

34. How many of the following numbers are divisible by 3 but not by 9 ?  
2133, 2343, 3474, 4131, 5286, 5340, 6336, 7347, 8115, 9276

A) 5 B) 6 C) 7 D) None of these

35. (963 + 476)2 + (963 - 476)2  
= ?  
  
  
(963 x 963 + 476 x 476)

A) 1449 B) 497 C) 2 D) 4 E) None of these

36. How many 3 digit numbers are divisible by 6 in all ?

A) 149 B) 150 C) 151 D) 166

37. A 3-digit number 4a3 is added to another 3-digit number 984 to give a 4-digit number 13b7, which is divisible by 11. Then, (a + b) = ?

A) 10 B) 11 C) 12 D) 15

38. 8597 - ? = 7429 - 4358

A) 5426 B) 5706 C) 5526 D) 5476 E) None of these

39. The smallest prime number is:

A) 1 B) 2 C) 3 D) 4

40. (12345679 x 72) = ?

A) 88888888 B) 888888888 C) 898989898 D) 9999999998

41. On dividing a number by 357, we get 39 as remainder. On dividing the same number 17, what will be the remainder ?

A) 0 B) 3 C) 5 D) 11

42. If the product 4864 x 9 P 2 is divisible by 12, then the value of P is:

A) 2 B) 5 C) 6 D) 8 E) None of these

43. Which one of the following is the common factor of (4743 + 4343) and (4747 + 4347) ?

A) (47 - 43) B) (47 + 43) C) (4743 + 4343) D) None of these

44. -84 x 29 + 365 = ?

A) 2436 B) 2801 C) -2801 D) -2071 E) None of these

45. A number when divided by 296 leaves 75 as remainder. When the same number is divided by 37, the remainder will be:

A) 1 B) 2 C) 8 D) 11

46. In dividing a number by 585, a student employed the method of short division. He divided the number successively by 5, 9 and 13 (factors 585) and got the remainders 4, 8, 12 respectively. If he had divided the number by 585, the remainder would have been

A) 24 B) 144 C) 292 D) 584

47. In a division sum, the divisor is 10 times the quotient and 5 times the remainder. If the remainder is 46, what is the dividend ?

A) 4236 B) 4306 C) 4336 D) 5336 E) None of these

48. 4500 x ? = 3375

A) 2  
  
  
5 B) 3  
  
  
4 C) 1  
  
  
4 D) 3  
  
  
5 E) None of these

49. What smallest number should be added to 4456 so that the sum is completely divisible by 6 ?

A) 4 B) 3 C) 2 D) 1 E) None of these

50. What least number must be subtracted from 13601, so that the remainder is divisible by 87 ?

A) 23 B) 31 C) 29 D) 37 E) 49

51. 476 \*\* 0 is divisible by both 3 and 11. The non-zero digits in the hundred's and ten's places are respectively:

A) 7 and 4 B) 7 and 5 C) 8 and 5 D) None of these

52. If the number 97215 \* 6 is completely divisible by 11, then the smallest whole number in place of \* will be:

A) 3 B) 2 C) 1 D) 5 E) None of these

53. (112 + 122 + 132 + ... + 202) = ?

A) 385 B) 2485 C) 2870 D) 3255

54. If the number 5 \* 2 is divisible by 6, then \* = ?

A) 2 B) 3 C) 6 D) 7

55. Which of the following numbers will completely divide (4915 - 1) ?

A) 8 B) 14 C) 46 D) 50

56. 9 +  
3  
+ 7 +  
2  
-  
  
9 +  
1  
  
= ?  
  
  
4  
17  
15

A) 7 +  
719  
  
  
1020 B) 9 +  
817  
  
  
1020 C) 9 +  
719  
  
  
1020 D) 7 +  
817  
  
  
1020 E) None of these

57. 1 -  
1  
  
+  
  
1 -  
2  
  
+  
  
1 -  
3  
  
+ ... up to n terms = ?  
  
  
n  
n  
n

A) 1  
n  
  
  
2 B) 1  
(n - 1)  
  
  
2 C) 1  
n(n - 1)  
  
  
2 D) None of these

58. On dividing 2272 as well as 875 by 3-digit number N, we get the same remainder. The sum of the digits of N is:

A) 10 B) 11 C) 12 D) 13

59. A boy multiplied 987 by a certain number and obtained 559981 as his answer. If in the answer both 9 are wrong and the other digits are correct, then the correct answer would be:

A) 553681 B) 555181 C) 555681 D) 556581

60. How many prime numbers are less than 50 ?

A) 16 B) 15 C) 14 D) 18

61. When a number is divided by 13, the remainder is 11. When the same number is divided by 17, then remainder is 9. What is the number ?

A) 339 B) 349 C) 369 D) Data inadequate

62. (51 + 52 + 53 + ... + 100) = ?

A) 2525 B) 2975 C) 3225 D) 3775

63. (800 ÷ 64) x (1296 ÷ 36) = ?

A) 420 B) 460 C) 500 D) 540 E) None of these

64. Which natural number is nearest to 8485, which is completely divisible by 75 ?

A) 8475 B) 8500 C) 8550 D) 8525 E) None of these

65. If the number 42573 \* is exactly divisible by 72, then the minimum value of \* is:

A) 4 B) 5 C) 6 D) 7 E) 8

66. Which of the following numbers is divisible by each one of 3, 7, 9 and 11 ?

A) 639 B) 2079 C) 3791 D) 37911 E) None of these

67. Which natural number is nearest to 9217, which is completely divisible by 88 ?

A) 9152 B) 9240 C) 9064 D) 9184 E) None of these

68. (4300731) - ? = 2535618

A) 1865113 B) 1775123 C) 1765113 D) 1675123 E) None of these

69. n is a whole number which when divided by 4 gives 3 as remainder. What will be the remainder when 2n is divided by 4 ?

A) 3 B) 2 C) 1 D) 0

70. (489 + 375)2 - (489 - 375)2  
= ?  
  
  
(489 x 375)

A) 144 B) 864 C) 2 D) 4 E) None of these

71. 397 x 397 + 104 x 104 + 2 x 397 x 104 = ?

A) 250001 B) 251001 C) 260101 D) 261001

72. (35423 + 7164 + 41720) - (317 x 89) = ?

A) 28213 B) 84307 C) 50694 D) 56094 E) None of these

73. (xn - an) is completely divisible by (x - a), when

A) n is any natural number B) n is an even natural number C) n is and odd natural number D) n is prime

74. Which one of the following numbers is completely divisible by 45?

A) 181560 B) 331145 C) 202860 D) 2033555 E) None of these

75. Which of the following numbers will completely divide (325 + 326 + 327 + 328) ?

A) 11 B) 16 C) 25 D) 30

76. A number when divide by 6 leaves a remainder 3. When the square of the number is divided by 6, the remainder is:

A) 0 B) 1 C) 2 D) 3

77. The sum of the two numbers is 12 and their product is 35. What is the sum of the reciprocals of these numbers ?

A) 12  
  
  
35 B) 1  
  
  
35 C) 35  
  
  
8 D) 7  
  
  
32

78. What will be remainder when 17200 is divided by 18 ?

A) 17 B) 16 C) 1 D) 2

79. If 1400 x x = 1050. Then, x = ?

A) 1  
  
  
4 B) 3  
  
  
5 C) 2  
  
  
3 D) 3  
  
  
4 E) None of these

80. (12 + 22 + 32 + ... + 102) = ?

A) 330 B) 345 C) 365 D) 385

81. The difference of the squares of two consecutive even integers is divisible by which of the following integers ?

A) 3 B) 4 C) 6 D) 7

82. Which one of the following is a prime number ?

A) 119 B) 187 C) 247 D) 551 E) None of these

83. The sum all even natural numbers between 1 and 31 is:

A) 16 B) 128 C) 240 D) 512

84. The difference between the place value and the face value of 6 in the numeral 856973 is

A) 973 B) 6973 C) 5994 D) None of these

85. If a and b are odd numbers, then which of the following is even ?

A) a + b B) a + b + 1 C) ab D) ab + 2 E) None of these

86. Which one of the following numbers is completely divisible by 99?

A) 3572404 B) 135792 C) 913464 D) 114345 E) None of these

87. The sum of how many terms of the series 6 + 12 + 18 + 24 + ... is 1800 ?

A) 16 B) 24 C) 20 D) 18 E) 22

88. (51+ 52 + 53 + ... + 100) = ?

A) 2525 B) 2975 C) 3225 D) 3775

89. 1904 x 1904 = ?

A) 3654316 B) 3632646 C) 3625216 D) 3623436 E) None of these

90. What is the unit digit in(795 - 358)?

A) 0 B) 4 C) 6 D) 7

91. Which one of the following is a prime number ?

A) 161 B) 221 C) 373 D) 437 E) None of these

92. The smallest 6 digit number exactly divisible by 111 is:

A) 111111 B) 110011 C) 100011 D) 110101 E) None of these

93. The largest 5 digit number exactly divisible by 91 is:

A) 99921 B) 99918 C) 99981 D) 99971 E) None of these

94. 768 x 768 x 768 + 232 x 232 x 232  
= ?  
  
  
768 x 768 - 768 x 232 + 232 x 232

A) 1000 B) 536 C) 500 D) 268 E) None of these

95. The smallest 5 digit number exactly divisible by 41 is:

A) 1004 B) 10004 C) 10045 D) 10025 E) None of these

96. How many terms are there in the G.P. 3, 6, 12, 24, ... , 384 ?

A) 8 B) 9 C) 10 D) 11 E) 7

97. If x and y are positive integers such that (3x + 7y) is a multiple of 11, then which of the following will be divisible by 11 ?

A) 4x + 6y B) x + y + 4 C) 9x + 4y D) 4x - 9y

98. 9548 + 7314 = 8362 + (?)

A) 8230 B) 8410 C) 8500 D) 8600 E) None of these

99. In a division sum, the remainder is 0. As student mistook the divisor by 12 instead of 21 and obtained 35 as quotient. What is the correct quotient ?

A) 0 B) 12 C) 13 D) 20

100. 2 + 22 + 23 + ... + 29 = ?

A) 2044 B) 1022 C) 1056 D) None of these

101. The sum of even numbers between 1 and 31 is:

A) 6 B) 28 C) 240 D) 512

102. If the number 91876 \* 2 is completely divisible by 8, then the smallest whole number in place of \* will be:

A) 1 B) 2 C) 3 D) 4 E) None of these

103. 2056 x 987 = ?

A) 1936372 B) 2029272 C) 1896172 D) 1926172 E) None of these

104. On multiplying a number by 7, the product is a number each of whose digits is 3. The smallest such number is:

A) 47619 B) 47719 C) 48619 D) 47649

105. If 60% of  
3  
of a number is 36, then the number is:  
  
  
5

A) 80 B) 100 C) 75 D) 90

106. If x and y are the two digits of the number 653xy such that this number is divisible by 80, then x + y = ?

A) 2 or 6 B) 4 C) 4 or 8 D) 8 E) None of these

107. The difference of the squares of two consecutive odd integers is divisible by which of the following integers ?

A) 3 B) 6 C) 7 D) 8

108. What is the unit digit in (4137)754?

A) 1 B) 3 C) 7 D) 9

109. 587 x 999 = ?

A) 586413 B) 587523 C) 614823 D) 615173

110. A number was divided successively in order by 4, 5 and 6. The remainders were respectively 2, 3 and 4. The number is:

A) 214 B) 476 C) 954 D) 1908

111. If (64)2 - (36)2 = 20 x x, then x = ?

A) 70 B) 120 C) 180 D) 140 E) None of these

112. Which one of the following can't be the square of natural number ?

A) 32761 B) 81225 C) 42437 D) 20164 E) None of these

113. (22 + 42 + 62 + ... + 202) = ?

A) 770 B) 1155 C) 1540 D) 385 x 385

114. 854 x 854 x 854 - 276 x 276 x 276  
= ?  
  
  
854 x 854 + 854 x 276 + 276 x 276

A) 1130 B) 578 C) 565 D) 1156 E) None of these

115. 35 + 15 x 1.5 = ?

A) 85 B) 51.5 C) 57.5 D) 5.25 E) None of these

116. The sum of first 45 natural numbers is:

A) 1035 B) 1280 C) 2070 D) 2140

117. 666 ÷ 6 ÷ 3 = ?

A) 37 B) 333 C) 111 D) 84 E) None of these

118. The sum of all two digit numbers divisible by 5 is:

A) 1035 B) 1245 C) 1230 D) 945 E) None of these

119. The difference between the place values of two sevens in the numeral 69758472 is

A) 0 B) 6993 C) 699930 D) None of these

120. On dividing a number by 68, we get 269 as quotient and 0 as remainder. On dividing the same number by 67, what will the remainder ?

A) 0 B) 1 C) 2 D) 3

121. What is the unit digit in the product (365 x 659 x 771)?

A) 1 B) 2 C) 4 D) 6

122. 3251 + 587 + 369 - ? = 3007

A) 1250 B) 1300 C) 1375 D) 1200 E) None of these

123. 7589 - ? = 3434

A) 4242 B) 4155 C) 1123 D) 11023 E) None of these

124. 217 x 217 + 183 x 183 = ?

A) 79698 B) 80578 C) 80698 D) 81268

125. The unit digit in the product (784 x 618 x 917 x 463) is:

A) 2 B) 3 C) 4 D) 5

126. If the number 653 xy is divisible by 90, then (x + y) = ?

A) 2 B) 3 C) 4 D) 6

127. 3897 x 999 = ?

A) 3883203 B) 3893103 C) 3639403 D) 3791203 E) None of these

128. What is the unit digit in 7105 ?

A) 1 B) 5 C) 7 D) 9

129. Which of the following numbers will completely divide (461 + 462 + 463 + 464) ?

A) 3 B) 10 C) 11 D) 13

130. 106 x 106 - 94 x 94 = ?

A) 2400 B) 2000 C) 1904 D) 1906 E) None of these

131. A number when divided successively by 4 and 5 leaves remainders 1 and 4 respectively. When it is successively divided by 5 and 4, then the respective remainders will be

A) 1, 2 B) 2, 3 C) 3, 2 D) 4, 1

132. 8796 x 223 + 8796 x 77 = ?

A) 2736900 B) 2638800 C) 2658560 D) 2716740 E) None of these

133. 8988 ÷ 8 ÷ 4 = ?

A) 4494 B) 561.75 C) 2247 D) 280.875 E) None of these

134. 287 x 287 + 269 x 269 - 2 x 287 x 269 = ?

A) 534 B) 446 C) 354 D) 324 E) None of these

135. 3 + 33 + 333 + 3.33 = ?

A) 362.3 B) 372.33 C) 702.33 D) 702 E) None of these

136. Which one of the following can't be the square of natural number ?

A) 30976 B) 75625 C) 28561 D) 143642 E) None of these

137. (1000)9 ÷ 1024 = ?

A) 10000 B) 1000 C) 100 D) 10 E) None of these

138. {(476 + 424)2 - 4 x 476 x 424} = ?

A) 2906 B) 3116 C) 2704 D) 2904 E) None of these