QUANTITATIVE ABILITY *(Answers on page 2)*
NUMBERS - 1

1) Sophy divided a number of Eclairs into two halves and one half is given to the youngest girl in the family. Sophy further divided the other half into smaller groups of chocolates. Each of the small group of Eclairs then given to the other 3 boys of the family. If two of those boys together got 14 Eclairs, then how many Eclairs were given to the youngest girl?
   a) 42   b) 28   c) 21   d) 56

2) The digital sum of a two-digit number is 10 and the difference between the digits is 4. Find out the number?
   a) 73   b) 64   c) 37   d) Either (a) or (c)

3) A snake boat race had 23 participants. All but 11 snake boats qualified in the first round. How many of the snake boats didn't qualify in the first round?
   a) 11   b) None   c) 12   d) 9

4) The product of the digits of a two-digit number is 6. Find the number, if the digits of the actual number is reversed when 9 is added to the number?
   a) 32   b) 16   c) 61   d) 23

5) A zoo keeper was asked how many wild cats she had in the zoo. She replied that there were all Tigers but eight, all Leopards eight, and all Cheetahs but eight. Altogether, how many wild cats she had in the zoo?
   a) 24   b) 16   c) 12   d) 8

6) If one-fifth of one-third of a number is 12, then three-fourth of that number is:
   a) 135   b) 240   c) 09   d) 90

7) College union has organized a one-to-one debate competition for 20 candidates. Every time a member loses the debate he/she is out. There are no ties. What is the minimum number of debate rounds to be conducted to find out the winner?
   a) 10   b) 40   c) 19   d) None of these

8) In a two-digit number, if the unit digit exceeds its ten's digit by 1. The product of the given number and the sum of its digits is equal to 616, then the number is:
   a) 34   b) 67   c) 45   d) 56

9) A group of 87 mountaineers and Sherpas taking part in Mount Everest Expedition through the base camp at Nepal side. For every mountaineer there are two Sherpas. The number of mountaineers in the group is:
   a) 25   b) 29   c) 58   d) 32

10) If the number 439$526 is completely divisible by 3, then the smallest whole number in the place of $ will be:
    a) 3   b) 2   c) 0   d) 1

11) 5042 + 4756 – 4001 – 6403 – 2584 + 8715 = ?

   a) 5627   b) 5431   c) 5525   d) 5769

12) 2 + 22 + 222 + 22.2 =

   a) 268.2   b) 267.2   c) 264.2   d) 246.2

13) 3450 x ? = 2300

   a) 3/4   b) 5/8   c) 1/4   d) 2/3

14)
$$\frac{432 \times 432 + 368 \times 368 - 432 \times 368}{432 \times 432 \times 432 + 368 \times 368 \times 368} = ?$$

   a) 1/600   b) 1/458   c) 1/800   d) None of these

15) (640 ÷ 15) x (1200 ÷ 32) = ?

   a) 1730   b) 1600   c) 1320   d) 1700

16) Find the sum of first 60 natural numbers.

   a) 2110   b) 1640   c) 1830   d) 2430

17) Find the sum of the natural numbers from 21 to 40.

   a) 760   b) 520   c) 850   d) 610

18) $(1^2 + 2^2 + 3^2 + ... + 20^2)$ is equal to:

   a) 2870   b) 2530   c) 2473   d) None of these
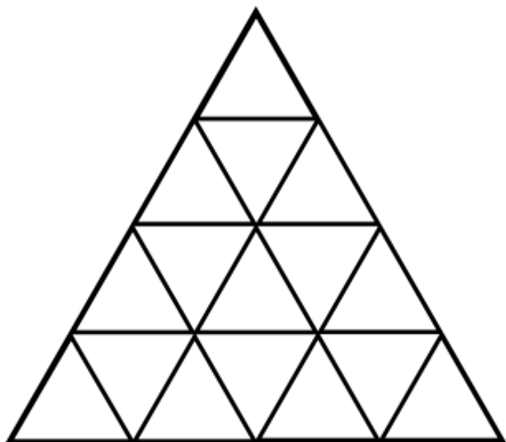
19) If 20% of 2/3 of a number is 80. Find the number?

   a) 400   b) 600   c) 800   d) 200

20) $(1^3 + 2^3 + 3^3 + ... + 8^3)$ is equal to:

   a) 1025   b) 1084   c) 1296   d) None of these

21) Consider the given picture. How many triangles are there altogether?

   a) 25   b) 31   c) 27   d) None of these

Answers:

1) c (21)

2) d (Either (a) or (c)

3) a (11) (All **but** 11 qualified means, 11 boats did not qualify)

4) d (23)

5) c (12)

6) a (135)

7) c (19)

8) d (56)

9) b (29)

10) d (1) (If the number is a multiple of 3, then its digital sum must be a multiple of 3. Here digital sum is 4+3+9+$+5+2+6 = 29+$, in order to get the smallest number is $ = 1. ie 29+1=30)

11) c (5525)

12) a (268.2)

13) d (2/3) (3450x2/3 = 2300)

14) c (1/800)

$$\text{Explanation for Q.14} = \frac{(a^2 + b^2 - ab)}{(a^3 + b^3)} = \frac{1}{(a + b)} = \frac{1}{(432 + 368)} = \frac{1}{800}$$

15) b (1600)

16) c (1830)

17) d (610)

18) a (2870)

19) b (600)

20) c (1296)

21) c (27)