Mental Ability
Self Evaluation Test-02 (Number System)

1. What will be digit at unit place in 222^{777} ?
   (a) 2   (b) 4
   (c) 8   (d) 6

2. What will be digit at unit place in $(777)^{9999}$?
   (a) 7   (b) 9
   (c) 3   (d) 1

3. What will be digit at unit place in $(729)^{2729}$?
   (a) 1   (b) 9
   (c) 6   (d) None

4. If 4^{739} is divided by 7, what will be remainder?
   (a) 4   (b) 6
   (c) 2   (d) 1

5. If 4^{219} is divided by 7, then what will be remainder?
   (a) 4   (b) 6
   (c) 1   (d) 2

6. What will be remainder when $256 \times 381 \times 462 \times 289$ will be divided by 11
   (a) 7   (b) 4
   (c) 2   (d) 0

7. What will be remainder when $362 \times 461 \times 2761$ will be divided by 6
   (a) 2   (b) 4
   (c) 1   (d) None

8. If a number is divided by 5 it leaves remainder 3. But when the same no. is divided by 3 it leaves remainder 2. Then what will be remainder when the same no. will be divided by 15
   (a) 1   (b) 8
   (c) 5   (d) 7

9. If a number is divided by 3 and 5 successively it leaves remainder 1 and 2 respectively. What will be remainder when the same no. will be divided by 15?
   (a) 6   (b) 4
   (c) 8   (d) None

10. What will be remainder when $23^{33} + 15^{33}$ is divided by 19
    (a) 12   (b) 7
    (c) 1   (d) 0

11. When $13^{19} + 29^{19} + 18^{19}$ is divided by 15, what will be remainder
    (a) 1   (b) 4
    (c) 2   (d) 0

12. When 41^{2010} is divided by 40, then the remainder will be
    (a) 0   (b) 1
    (c) 10   (d) None

13. The total no. of divisor of 180
    (a) 28   (b) 18
    (c) 20   (d) None

14. Sum of all proper divisors of 9900
    (a) 23851   (b) 23951
    (c) 33852   (d) None

15. Sum of all even divisors of 480
    (a) 1442   (b) 1428
    (c) 1488   (d) None

16. When I distributed some chocklates to my 40 students, three chocolates will be left. If I distribute the same no. of chocolates to my 40 students and my colleague Mr. Shyam, seven chocolates are left. Find the minimum no. of chocolates I have
    (a) 1247   (b) 1476
    (c) 1642   (d) None

17. When a number is divided by 15, it leaves a remainder of 7. What will be remainder when thrice of number is divided by 5
    (a) 3   (b) 2
    (c) 1   (d) None

18. How many no. are from 1 to 1000 which are divisible by 2 or 3
    (a) 166   (b) 567
    (c) 667   (d) 666

19. How many times digit 5 will appear from 450 to 700 (both are inclusive)
    (a) 140   (b) 150
    (c) 154   (d) 155

20. What will be digit at unit place in $32^{32^{32}}$
    (a) 2   (b) 4
    (c) 8   (d) 6

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