

Note:

- 1) Fill in the response sheet with your Name, Class, the institution through which you appear in the specified places.
- 2) Diagrams are only visual aids; they are not drawn to scale.
- 3) You are free to do rough work on separate sheets.
- 4) Duration of the test: 2 p.m. to 4. p.m. - 2 hours.

PART – A

Note:

- Only one of the choices A,B,C,D is correct for each question. Shade that alphabet of your choice in the response sheet. (If you have any doubt in the method of answering, seek the guidance of your supervisor).
- For each correct response you get 1 mark; for each incorrect response you lose $\frac{1}{2}$ mark.

1. A 3-digit number is divisible by 35. The greatest such number has in its tens place the digit

a) 4	b) 7	c) 9	d) 8
------	------	------	------
2. When 2^{2015} is completely calculated the units place of the number obtained is

a) 2	b) 4	c) 8	d) 6
------	------	------	------
3. The L.C.M of $4\frac{1}{2}$, 3 and $10\frac{1}{2}$ is

a) 62	b) 18	c) 63	d) 64
-------	-------	-------	-------
4. The ratio of the money with Samrud and Saket is 7:15 and that with Saket and Vishwa is 7:16. If Samrud has Rs. 490, the amount of money Vishwa has

a) 2000	b) 4900	c) 2400	d) 2015
---------	---------	---------	---------
5. Two numbers are respectively 26% and 5% more than a third number. What percent is the first of the second?

a) 80	b) 120	c) 90	d) 75
-------	--------	-------	-------
6. The average age of 24 students and the class teacher is 16 years. If the age of the class teacher is excluded, the average age reduces by 1 year. The age of the class teacher (in years) is

a) 40	b) 45	c) 50	d) 55
-------	-------	-------	-------

7. Mahadevan told his granddaughter, "I am 66 years old, of course not counting the Sundays". The correct age of Mahadevan is

- a) 77 b) 78 c) 79 d) 81

8. A rectangle has length 9 times its width. The ratio of its perimeter to the perimeter of the square of same area is

- a) 5:4 b) 6:5 c) 5:3 d) 7:5

9. ABCD is a square of side 1cm. O is the point of intersection of the diagonals. P is the midpoint of OB. Then the length of AP² (in cm) is

- a) $\frac{3}{8}$ b) $\frac{3}{4}$ c) $\frac{3}{5}$ d) $\frac{5}{8}$

10. The average of 10 consecutive odd numbers is 120. What is the average of the 5 smallest numbers among them

- a) 100 b) 105 c) 110 d) 115

11. abc is a three digit number where a,b,c are the digits. How many are there such that $a \times b \times c = 12$.

- a) 12 b) 6 c) 4 d) 32

12. Slok is a primary school child. He calculated the number of Sundays occurring in 45 consecutive days. He was very happy that he got the maximum Sundays. This maximum number is

- a) 6 b) 7 c) 8 d) 5

13. The value of $\frac{50}{72} + \frac{50}{90} + \frac{50}{110} + \dots + \frac{50}{9900}$ is

- a) $\frac{23}{4}$ b) $\frac{32}{7}$ c) $\frac{1}{2015}$ d) $\frac{55}{27}$

14. In the figure given below, the distance between two adjacent dots horizontally or vertically is 1 unit. A is the area of the shaded region in figure (1), B is the area of the Shaded region in figure (2). Then A : B is



Figure (1)



Figure (2)

- a) 4:3 b) 5:1 c) 9:4 d) 6:1

15. Which one is true for the following set of five natural numbers

24, 25, 26, 27, 28

- a) When 3,4,5,6 and 7 are added respectively to the numbers, we get a set of 5 primes.
- b) When 5 is added to 24, 6 is subtracted from 25, 7 is added to 26, 8 is subtracted from 27 and 9 is added to 28, we get a set of 5 primes.
- c) All the 5 numbers are composite.
- d) When 1 is added to all we get a set of primes.

PART – B

Note:

- Write the correct answer in the space provided in the response sheet.
- For each correct response you get 1 mark; for each incorrect response you lose ¼ mark.

16. 75 is written as the sum of 10 consecutive natural numbers. The maximum of the numbers is _____.

17. The number of 4-digit numbers of different digits greater than 2000 which contains the digits of 2015 is _____.

18. In a box there are green, red and blue beads. The number of beads which are not green is 9. The number of beads which are not red is 8 and the number of beads which are not blue is 7. Total number of beads in the box is _____.

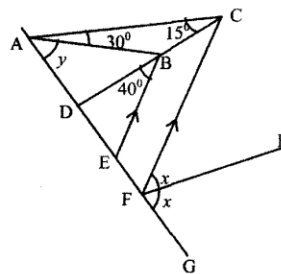
19. A sequence of numbers 1,2,3,... follows the rule that every number from the 4th term is the sum of the previous three numbers. The tenth number in the sequence is _____.

20. In the adjoining figure. ABC is a triangle.

AD is perpendicular to CB produced. BE

is parallel to CF . FH bisector $\angle CFG$. The

value of $x + y$ is _____.



S
U
C
C
E
S
S
I
S
a state of mind
If you want success,
start thinking of yourself
as a SUCCESS
Dr. Joyce Brothers | Fatmate.com