



RAMAGYA SCHOOL, NOIDA
V/Mathematics/2017-18
Olympiad Practice Worksheet

CONCEPT BASED QUESTIONS

1. In the following number $32*21$ which digit should replace the asterisk so that the number is divisible by 9?
a) 1 b) 3 c) 9 d) 6
2. The two consecutive prime numbers with difference 2 are called:
a) co-primes b) twin primes c) composite d) none of these
3. Every number is a _____ and a _____ of itself.
a) factor, multiple b) prime, composite
c) even, odd d) none of these
4. The sum of the first five multiples of 6 is _____.
a) 90 b) 60 c) 30 d) 120
5. The difference between the place value and face value of 5 in 91, 25,678 is _____.
a) 0 b) 4,095 c) 5,000 d) 4,995
6. 50 thousands – 12 thousands – 3 hundreds = _____.
a) 35,000 b) 38,700 c) 37,700 d) 48,500

APPLICATIONS BASED QUESTIONS

7. Suman quickly estimated the product of 796×19 in the following manner. She rounded each number to the nearest ten. She multiplied these new numbers together. What was Suman's estimate?
a) 14,000 b) 15,000 c) 16,000 d) 15,800
8. 45,109 is the same as:
a) 4 thousands, 5 hundreds, 1 tens and 9 ones
b) 4 ten thousands, 5 thousands, 1 hundreds and 9 ones
c) 4 ten thousands, 5 thousands, 1 tens and 9 ones
d) 4 ten thousands, 4 thousands and 9 ones
9. When 32,465 is broken down according to its digit values, it becomes:
a) $32000 + 460 + 5$ b) $32000 + 400 + 60 + 5$
c) $30000 + 2000 + 400 + 65$ d) $30000 + 2000 + 400 + 60 + 5$

10. Which number is the multiple of 12?

- a) 42 b) 36 c) 92 d) 88

11. Which choice is NOT a factor of 40?

- a) 20 b) 10 c) 8 d) 3

LOGICAL BASED QUESTIONS

12. DWH is related to WDS in the same way as FUL is related to:

- a) UFO b) OFU c) FOU d) ELV

13. Choose the term which will continue the following series.

P 3 C, R 5 F, T 8 I, V 12 L, ?

- a) Y 17 O b) X 17 M c) X 17 O d) X 16 O

14.

AMERICAN	CHINESE	INDIAN
6459	4234	1351

Table 1

Table 1 shows the population in a district. What is the difference between the total population of Chinese and Indians with the population of Americans?

- a) 774 b) 847 c) 874 d) 9342

15. Which set represents 4 multiples of 8?

- a) 14, 21, 28, 35 b) 18, 27, 36, 45
c) 16, 24, 32, 40 d) 12, 18, 24, 30

16. A composite number is:

- a) A number that has only 2 factors.
b) A number that creates other numbers.
c) Always last.
d) A number which has factors other than 1 and itself.

HOTS

17. A shopkeeper had a stock of 23,898 kg of wheat out of which 1,795 kg is sold in the morning and 2,348 kg of wheat is sold in the evening. Quantity of wheat left in the shop is _____.

- a) 1,97,555 kg b) 197 kg c) 19,755 kg d) 1,975 kg

18. Six friends P, Q, R, S, T and U are sitting around a circular table. U is sitting between T and S, R is sitting between Q and P. If T is sitting on the right of P, who is sitting between R and T?

- a) P b) S c) U d) Q

19. In three bowling games, Neha scores 139, 143 and 144. What score will Neha need in a fourth game in order to have an average score of 145 for all four games?

- a) 144 b) 154 c) 145 d) 155

20. The quotient of two numbers is 3. The product of the two numbers is 48. What are the two numbers?

a) 36,3

b) 48,4

c) 12,4

d) 12,3