

Placement paper of CTS - 05

CTS

JANUARY 9TH

1. If $[x]$ indicates integral of x i.e. is the largest integer less than x and $|x|$ indicates absolute value of x then what is the maximum value of $[x]/|x|$.
A. 1 B. 0 C. -1 D. None of these Ans: A

2. In the above question what is the minimum value of $[x]/|x|$.
A. 1 B. 0 C. -1 D. None of these Ans: D

(3-6)
If the clock (Conventional clock with numbers from 1 to 12 in order) is cut into 3 pieces such that the sum of numbers on each piece are in Arithmetic Progression (A.P) with a common difference of 1.

3. What is the sum of even numbers in the group where 5 is present?
A. 4 B. 10 C. 12 D. 14 Ans: B

4. What is the product of all numbers in the group in which 12 is present
A. 212 B. 252 C. 244 D. None of these

5. What is the count of numbers in each piece.
A. 2,2,5 B. 5,5,2 C. 3,4,5 D. 6,4,2 Ans: C

6. What is the sum of the numbers in the group where 9 is present (excluding 9)
A. 12 B. 20. C. 18 D. 21 Ans: C

7.
8. Avinash takes 15 days to complete a work and Bada takes 12 days to complete the same work. If they work in alternate days, In how many days they finish the work.
A. 13 days B. 13 1/4 days C. 6 1/4 days D. None Ans:

9. There is a circular track of length 400 mts. If A and B Starts at the same point but in opposite direction with a speeds of 8 m/sec and 12 m/s respectively. Then at what time after the beginning they will meet for the second time.
A. 1hr 40 sec B. 20 sec C. 40sec D. 3hr 20 sec Ans: C

10. In the above question when will they meet for the first time at the starting point.
A. 1hr 40 sec B. 20 sec C. 40sec D. 3hr 20 sec Ans: A

11. If the vertices of the triangle are A(1,2), B(-2,-3) and C(2,3) then which is the largest angle?
A. Angle(ABC) B. Angle(BAC) C. Angle(ACB) D. None Ans: B

12. If (-1,0), (0,-1) and (-1,-1) are three vertices of a square then what is the 4th vertex.

13. If $[x]$ indicates integral of x i.e. is the largest integer less than x and $|x|$ indicates absolute value of x then find the value of $[1.99]+[-2.99]+[1.03]+[2.50]$
A. 2 B. 1 C. -2 D. -5 Ans: A

(14-15). Watch the below Algorithm for 4 digit number X.
; Step1: Add all the numbers
Step2: If it is less than 10 STOP, else go to Step1.

14. If $X=6724$ then what is the end result after applying the above algorithm.
A. 19 B. 10 C. 1 D. None Ans: C

15. If the 4 numbers are arranged in all possible orders then how many solutions are possible.
A. ONE B. TWO C. THREE D. NONE Ans: A

16. A trader frauds by 10% while buying and 10% while selling the same. What is the total gain he obtained during the transaction?
A. 13 B. 22 1/4 C. 20 D. None of these Ans.

17. There are three cylinders with same height and surface area. If a new cylinder is created by melting these three with the same height as before what is the surface area of the new cylinder when compared to that of the previous.
A. 25% more B. 50% more C. 100% more D. None Ans.

18. If $x=a$ then $y=b$ except when $x=b$ and $y=a$. If $x=a$, then p,q,r,s but when x not equal to a then $p,q,r,s=e,f,g,h$. If $x=m$ or n then both characters preceding it and following it also equals the same with the precedence to the preceding character.

There are 5 questions based on the above.

(19-24) Based on Sentence completion.

(25-31) Based on passages. (Barrons GRE must be enough)