CBT_5

SUB. APTITUDE
The No. of Question is 15 (each Q. carrying 1 mark)
Should be Complete in 30 min
The average score will be 10.50

I...of Sem………………Brach...............Roll. No….…....Dt………....….........

1. The value of $\left(3+\sqrt{8}\right)+\frac{1}{3-\sqrt{8}}-\left(6+4\sqrt{2}\right)$ is

   (A) 8   (B) 1   (C) 2   (D) 0

2. If $\sqrt[3]{3^n}$ = 27, then the value of n is :

   (A) 9   (B) 6   (C) 1   (D) 3

3. A man bought 13 articles at Rs.70 each, 15 at Rs.60 each and 12 at Rs.65 each. The average price per article is

   (A) Rs.60.25   (B) Rs.64.75

   (C) Rs.65.75   (D) Rs.62.25

4. 4 boys and 3 girls spent Rs.120 on the average, of which boys spent Rs.150 on the average. Then the average amount spent by the girls is

   (A) Rs.80   (B) Rs.60

   (C) Rs. 90   (D) Rs.100

5. The average weight of first 11 persons among 12 persons is 95 kg. The weight of 12th person is 33 kg more than the average weight of all the 12 persons. The weight of the 12th person is

   (A) 128.75 kg   (B) 128 kg

   (C) 131 kg   (D) 97.45 kg

6. $\frac{(3.63)^2-(2.37)^2}{3.63+2.37}$ is simplified to

   (A) 6   (B) 1.36

   (C) 2.26   (D) 1.26

7. The average of some natural numbers is 15. If 30 is added to first number and 5 is subtracted from the last number the average becomes 17.5 then the number of natural number is

   (A) 15   (B) 30

   (C) 20   (D) 10

8. The average weight of 3 men A, B and C is 84 kg. Another man D joins the group and the average now becomes 80 kg. If another man E whose weight is 3 kg more then that of D, replaces A, then the average weight of B, C, D and E becomes 79 kg. Then weight of A is

   (A) 72 kg.   (B) 74 kg.

   (C) 75 kg.   (D) 76 kg.

9. Three numbers are such that the average of first two numbers is 2, the average of the last two numbers is 3 and the average of the first and the last numbers is 4, then the average of three numbers is equal to

   (A) 2   (B) 3.5

   (C) 3   (D) 2.5

10. The simplified value of

    $$\sqrt{5 + \sqrt{11 + \sqrt{19 + \sqrt{29 + \sqrt{49}}}}}$$ is

    (A) 3   (B) 2   (C) 4   (D) 6

11. If 90% of A = 30% of B and B = x% of A, then the value of x is

    (A) 800   (B) 300   (C) 700   (D) 400

12. If 30% of A is added to 40% of B, the answer is 80% of B. What percentage of A is B?

    (A) 30%   (B) 40%   (C) 70%   (D) 75%

13. If 40% of (A + B) = 60% of (A − B) then $\frac{2A-3B}{A+B}$ is

    (A) $\frac{7}{6}$ (B) $\frac{6}{7}$ (C) $\frac{5}{6}$ (D) $\frac{6}{5}$

14. In a big garden 60% of the trees are coconut trees, 25% of the number of coconut trees are mango trees and 20% of the number of mango trees are apple trees. If the number of apple trees are 1500, then the number of trees in the garden is:

    (A) 48000   (B) 50000

    (C) 51000   (D) 45000

15. The population of a village is 25,000. One fifth are females and the rest are males. 5% of males and 40% of females are uneducated. What percentage on the whole are educated?

    (A) 75%   (B) 88%

    (C) 55%   (D) 85%

CBT_5

I..of Sem………………Brach……….…....Roll. No………..Dt……………………

1. If MATHEMATICS = 12345123678, then MAHATHMA = ?
   (A) 12423412   (B) 12345123
   (C) 12345678   (D) 12425341

2. If D = 4, COVER = 63, then BASIS = ?
   (A) 55   (B) 50
   (C) 49   (D) 54

3. In a certain code language BLOOD is written as EIRLG. How will the word PERIOD be written in that code language ?
   (A) SBURAF   (B) SBUFRA
   (C) SUFBAR   (D) RBUFSA

4. In a certain code language INCORPORATE is written as HCGJSLJSXHO and PELMET is written as LOFDOH. How will the word MOLTEN be written in that code language ?
   (A) XHOTOR   (B) DJFHOC
   (C) LDOHCG   (D) FRTECO

5. Six girl are standing in a circle facing to the centre. Bindu is to the left of Viji. Rekha is in between Bindu and Mumtaz. Jessa is in between Viji and Nirmala. Who is to the left of Mumtaz ?
   (A) Rekha   (B) Nirmala
   (C) Viji   (D) Bindu

6. In a row of children, Ravi is fourth from right and Sham is second from left. When they interchange positions Ravi is ninth from right. What will be Sham's position from left ?
   (A) Fifth   (B) Sixth
   (C) Seventh   (D) Eighth

7. A, B, C, D, E and F are sitting around the round table with equal distances. F is sitting opposite to E and between A and D. C is sitting to the right side of E and opposite to A. Who are the neighbours of A?
   (A) F and D   (B) E and F
   (C) E and C   (D) B and F

8. Of the six members of a panel sitting in a row, A is to the right of C, but left of B. E is sitting left of C and right of D, who is sitting to the right of F. Find the members sitting at the two ends of the row.
   (A) D, F   (B) A, B
   (C) D, B   (D) F, B

9. On arranging Atomic Age, Metallic Age, Stone Age, Alloy Age in a meaningful order (starting from the earliest) which would appear in the 3rd position ?
   (A) Alloy Age   (B) Stone Age
   (C) Metallic Age   (D) Atomic Age

10. Which one of the given responses would be a meaningful order of the following?

1. India   2. Bangalore

3. Asia   4. Karnataka

(A) 3, 4, 2, 1   (B) 3, 1, 4, 2

(C) 3, 1, 2, 4   (D) 1, 2, 3, 4

11. What is the best way to order the progression in Hardware ?

1- Silicon chips

2- Transistors

3- Vacuum tube

4- Integrated circuits

(A) 4, 2, 3, 1   (B) 3, 4, 1, 2

(C) 3, 2, 4, 1   (D) 4, 1, 3, 2

12. A's mother is sister of B and has a daughter C. How can A be related to B from among the following?

(A) Niece   (B) Uncle

(C) Daughter   (D) Father

13. A and B are a married couple. C and D are brothers. C is the brother of A. How is D related to B ?

(A) Brother

(B) Son–in–law

(C) Cousin

(D) Brother–in–law

14. A and B are married couple. X and Y are brothers. X is the brother of A. How is Y related to B ?

(A) Brother-in-law

(B) Brother

(C) Son-in-law

(D) Cousin

15. A man 'P' goes to a party hosted by his brother 'Q' who has a daughter M. M is dancing with her brother 'N'. How is 'P' related to 'N' ?

(A) Nephew   (B) Father

(C) Uncle   (D) Cousin

SUB. ENGLISH
The No. of Question is 15 (each Q. carrying 1 mark)
Should be Complete in 20 min
The average score will be 10.50

I...of Sem………………Brach……….…....Roll. No…….....Dt……..…..............

PASSAGE

For the past several years, scientists have issued ominous warnings about the future of the. Earth's climate. Predictions of dramatic global change arising from the continued dumping of industrial by-products into the atmosphere and forest loss of massive scale can no longer be ignored. Compelling scientific evidence strongly suggests that world climate patterns, previously regarded as reliably stable, could be thrust into a state of turmoil.

Emissions of natural and synthetic gases are increasing the heat-trapping capacity of the atmosphere through a phenomenon known as the greenhouse effect. The projected impacts of this world-wide climatic disruption dwarf many of the environmental problems of the past.

1. What can no longer be ignored?

   (A) dramatic atmospheric change

   (B) dumping of industrial by-products

   (C) predictions of global change

   (D) massive forest loss

2. "Ominous" in line 1 means

   (A) clear

   (B) inauspicious

   (C) detailed

   (D) frequent

3. "Projected" in the last sentence means

   (A) expected

   (B) proposed

   (C) stated

   (D) apprehended

4. The greenhouse effect is a phenomenon that increases

   (A) emission of natural gas

   (B) emission of synthetic gas

   (C) production of heat

   (D) retention of heat

5. That world climate patterns will change drastically is

   (A) probable

   (B) improbable

   (C) possible

   (D) impossible

6. Four miles beyond (A)/ that pasture was seen thousands (B)/ of cattle including some lambs. (C)/ No error (D)

7. It is noticed that the elite class have no soft (A)/ corner for the downtrodden who are the (B)/real victims of the present social set-up. (C)/ No error (D)

8. Is there any difficulties (A)/ in disposing of this gorgeous building (B)/ built on such a spacious and beautiful north campus. (C)/ No error (D)

9. The request of the workers' union that their wages should be (A)/ increased were supported by (B)/ a vast majority. (C)/ No error (D)

10. The publisher says that there is (A)/ many important details to attend (B)/ to before this book gets printed. (C)/ No error (D)

11. The widely publicised manifesto (A)/ of the new party (B)/ is not much different than ours. (C)/ No error (D)

12. I was taken with surprise (A)/ when I saw (B)/ the glamorous Appu Ghar. (C)/ No error (D)

13. Man needs (A)/ security and leisure (B)/ of free thinking. (C)/ No error (D)

14. This watch (A)/ is superior and (B)/ more expensive than that.(C)/ No error (D)

15. It was apparent for everyone present (A)/ that if the patient did not receive (B)/ medical attention fast (C)/ he would die. (D)/ No error (e)

CBT_5

SUB. C Language
The No. of Question is 15 (each Q. carrying 1 mark)
Should be Complete in 20 min
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I...of Sem………………Brach……….…....Roll. No………...Dt………....…...........

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1. Formal parameter allocates memory or not?

   (A) Yes

   (B) No

   (C) Depends upon function calling mechanism

   (D) None of the above

2. What is the purpose of the NULL pointer in C?

   (A) It represents an uninitialized pointer.

   (B) It points to the memory location 0.

   (C) It is used for string manipulation.

   (D) It indicates the end of a linked list.

3. What is a pointer in C?

   (A) A variable that stores the memory address of another variable

   (B) A data type used to store characters

   (C) A reserved keyword for dynamic memory allocation

   (D) A special function to manipulate strings

4. In C, how can you find the number of elements in an array?

   (A) elements(array)

   (B) size(array)

   (C) sizeof(array) / sizeof(array[0])

   (D) length(array)

5. What is the role of the NULL character in a character array (string) in C?

   (A) Marks the end of the array.

   (B) Represents a null value in the array.

   (C) Initializes the array to zero.

   (D) Specifies the starting point of the array.

6. In C, the extern storage class is used for:

   (A) Defining global variables

   (B) Declaring global variables

   (C) Defining local variables

   (D) Declaring local variables

7. Which of the following data types is variable?

   (A) int

   (B) flaot

   (C) structure

   (D) char

8. Which of the following is a primary data type in C?

   (A) Array

   (B) Structure

   (C) Integer

   (D) Pointer

9. Which loop is known as exit control loop?

   (A) For

   (B) While

   (C) Do…..while

   (D) None

10. In C, what is the role of the return statement?

    (A) Declares a variable

    (B) Terminates the program

    (C) Exits a function and returns a value

    (D) Skips the current iteration of a loop

11. In C, what does a nested loop refer to?

    (A) A loop that runs forever

    (B) A loop inside another loop

    (C) A loop with a conditional statement

    (D) A loop with a switch statement

12. What is the primary purpose of functions in C?

    (A) To define variables

    (B) To perform mathematical operations

    (C) To encapsulate and organize code for reuse

    (D) To declare data types

13. Which function is used to copy one string to another in C?

    (A) copy()

    (B) strcpy()

    (C) duplicate()

    (D) copystring()

14. What will strcmp("a", "b") return?

    (A) 1

    (B) -1

    (C) 0

    (D) None

15. What will be the output of the following C code?

```
#include<stdio.h>
int main()
{
    printf("Hello");
    main();
    return 0;
}
```

    (A) Hello is printed once

    (B) Hello infinite number of times

    (C) Hello is not printed at all

    (D) 0 is returned

SUB. C++ Language
The No. of Question is 15 (each Q. carrying 1 mark)
Should be Complete in 20 min
The average score will be 10.50

I...of Sem………………Brach…….…........Roll. No………..Dt………....…...........

1. What is full form of OOPs?

   (A) Object programming system

   (B) Object oriented programming System

   (C) Object oriented programmings

   (D) None

2. What is output of following code?

   ```
   #include "iostream"
   using namespace std;
   int main ()
   {
   int a = 9 , b= 7, c= 15;
      if ( 4 < b && (a + b) < (b - a))
       {
           c= (6 & 10) +c;
           a= c;
       }
    cout << a+b+c<<endl;
   }
   ```

   (A) 27   (B) 34   (C) 40   (D) 31

3. What is output of following code?

   ```
   #include "iostream"
   using namespace std;
   int main ()
   ```

   ```
   {
      int p =1 , q= 1 , r= 1 ;
      if ( 0 || 1 || 1)
          p = p &1;
      else
          r = r & 1;
   cout << p+q+r<<endl;
   }
   ```

   (A) 10   (B) 18   (C) -1   (D) 3

4. Size of empty class size in C++ is _____byte?

   (A) 0byte   (B) 1byte

   (C) 4byte   (D) 2byte

5. Class size depends upon which _____ data member.

   (A) Static data member

   (B) Non static data member

   (C) Both static & none static data member

   (D) None of these

6. Which is not the member of class ___

   (A) Friend function

   (B) Non static method

   (C) Static data member

   (D) None of these

7. When constructor will be execute?

   (A) When object will be create

   (B) When object will be destroy

   (C) Both a & b

   (D) None

8. Constructor is a non-static member function?

   (A) True   (B) Both

   (C) False   (D) None

9. Static data member can be access by ___?

   (A) Only class name

   (B) Only object name

   (C) Both a & b

   (D) None

10. Who is known as father of c++?

    (A) Dennis Ritchie

    (B) james Gosling

    (C) Bjarne Stroustrup

    (D) Guido van rossum

11. Which of the following is the default return value of functions in C++?

    (A) int   (B) char   (C) float   (D) void

12. Where does the execution of the program starts?

    (A) user define function

    (B) main function

    (C) void function

    (D) None

13. By default return statement return how many values?

    (A) One   (B) More than two

    (C) Two   (D) Zero

14. In call by value which parameter allocates memory?

    (A) Actual parameter   (B) Formal parameter

    (C) Both I & ii   (D) None

15. What will be the output of the following C++ code?

    ```
    #include "iostream"

    using namespace std;

    int bbsr ();

    int main ()

    {

        int x =10;

        bbsr ();

    }

    int bbsr ()

    {

        cout << x <<endl;

    }
    ```

    (A) 10   (B) 0   (C) Error   (D) None