

SECTION#1

1). The binary equivalent of the Hexadecimal number 7BD is

- A. 11110111101
- B. 111010111101
- C. 101110111101
- D. All of the above
- E. None of the above

Answer: A

2. Which of the following is non-impact printer?

- A. Drum printer
- B. Line printer
- C. Chain printer
- D. Laser printer
- E. None of the above

Answer: D

3. In which year was the PC voted 'The Machine of the Year's by the American Time magazine?

- A. 1970
- B. 1975
- C. 1983
- D. 1987
- E. None of the above

Answer: C

4. When used with I/O devices, the term intelligent implies

- A. a color output capability
- B. speech processing capability
- C. high speed printing capability
- D. feature to support offline and online tasks
- E. None of the above

Answer: D

5. A prefix for billion which is equal to _____ is called as billi.

- A. 100
- B. 10000
- C. 1000
- D. 10
- E. None of the above

Answer: D

6. The operation of a digital computer is based on _____ principle.

- A. counting
- B. measuring
- C. electronic
- D. logical
- E. None of the above

Answer: A

7. Which of the following Indian companies designs and manufactures super- computers?

- A. C-DOT
- B. C-DAC
- C. CMC
- D. All of the above
- E. None of the above

Answer: B

8. Which of the following memories needs refresh?

- A. SRAM
- B. DRAM
- C. ROM
- D. All of the above
- E. None of the above

Answer: B

9. Which of the following is not a sequence storage device?

- A. Magnetic disk
- B. Magnetic tape
- C. Paper tape
- D. All of the above
- E. None of the above

Answer: A

10. The computers that we use are digital whereas we live in an analog world which means that we have to translate analog data into digital data. What is the name of the circuit which helps us in this conversion?

- A. D/A converter
- B. A/D converter
- C. Voice recognition
- D. Adapter
- E. None of the above

Answer: B

11). Which of the following statements best describes the batch method of input?

- A. Data is processed as soon as it is input
- B. Data is input at the time it is collected
- C. Data is collected in the form of source documents, placed into groups, and then input to the computer
- D. Source documents aren't used
- E. None of the above

Answer: C

12. What is the name of the memory card which is conceptually related to the smart card but is similar to the video disk?

- A. Laser card
- B. Master card
- C. Visa
- D. Optical card
- E. None of the above

Answer: A

13. In 1830, Charles Babbage designed a machine called the Analytical Engine which he showed at the Paris Exhibition. In which year was it exhibited?

- A. 1820
- B. 1860
- C. . 1855
- D. 1870
- E. None of the above

Answer: C

14. Which of the following is used to check for errors in RAM chips?

- A. ROM chip
- B. Microprocessor chip
- C. Parity chip
- D. EPROM chip
- E. None of the above

Answer: C

15. Which of the following is not an alternative name for primary memory?

- A. Main memory
- B. Primary storage
- C. Internal storage
- D. Mass storage
- E. None of the above

Answer: D

SECTION#2

1. Identify which of the following are declarations

1 : extern int x;

2 : float square (float x){... }

3 : double pow(double, double);

A.1

- B. 2
- C. 1 and 3
- D. 3

Ans : C

2. Which of the following statement obtains the remainder on dividing 5.5 by 1.3 ?

- A. `rem = (5.5 % 1.3)`
- B. `rem = modf(5.5, 1.3)`
- C. `rem = fmod(5.5, 1.3)`
- D. Error: we can't divide

Ans: C

3. What will be the output of the program?

```
#include<stdio.h>

int main()
{
    char c=48;
    int i, mask=01;
    for(i=1; i<=5; i++)
    {
        printf("%c", c|mask);
        mask = mask<<1;
    }
    return 0;
}
```

- A. 12400
- B. 12480
- C. 12500
- D. 12556

Ans: B

4. Point out the error in the following program.

```
#include<stdio.h>
#include<stdlib.h>

int main()
{
    int *a[3];
    a = (int*) malloc(sizeof(int)*3);
    free(a);
    return 0;
}
```

- A. Error: unable to allocate memory
- B. Error: We cannot store address of allocated memory in a
- C. Error: unable to free memory
- D. No error

Ans: B

5. What is the purpose of fflush() function.

- A. flushes all streams and specified streams.
- B. flushes only specified stream.
- C. flushes input/output buffer.
- D. flushes file buffer.

Ans; A

6. Point out the error, if any in the program.

```
#include<stdio.h>

int main()
{
    int a = 10;
    switch(a)
    {
    }
}
```

```
printf("This is c program.");  
return 0;  
}
```

- A. Error: No case statement specified
- B. Error: No default specified
- C. No Error
- D. Error: infinite loop occurs

Ans: C

7. What will be the output of the program?

```
#include<stdio.h>  
int addmult(int ii, int jj)  
{  
    int kk, ll;  
    kk = ii + jj;  
    ll = ii * jj;  
    return (kk, ll);  
}  
  
int main()  
{  
    int i=3, j=4, k, l;  
    k = addmult(i, j);  
    l = addmult(i, j);  
    printf("%d, %d\n", k, l);  
    return 0;  
}
```

- A. 12, 12
- B. 7, 7
- C. 7, 12

D. 12, 7

Ans: A

8. In C, if you pass an array as an argument to a function, what actually gets passed?

- A. Value of elements in array
- B. First element of the array
- C. Base address of the array
- D. Address of the last element of array

Ans: C

9. Out of fgets() and gets() which function is safe to use?

- A. gets()
- B. fgets()

Ans: B

10. In the following code what is 'P'?

```
typedef char *charp;  
const charp P;
```

- A. P is a constant
- B. P is a character constant
- C. P is character type
- D. None of above

Ans: A

11. What is x in the following program?

```
#include<stdio.h>  
  
int main()  
{  
    typedef char (*( *arrfptr[3] )())[10];  
    arrfptr x;  
    return 0;  
}
```


- A. x is a pointer
- B. x is an array of three pointer
- C. x is an array of three function pointers
- D. Error in x declaration

Ans : C

12. Which of the following is the correct usage of conditional operators used in C?

- A. `a>b ? c=30 : c=40;`
- B. `a>b ? c=30;`
- C. `max = a>b ? a>c?a:c:b>c?b:c`
- D. `return (a>b)?(a:b)`

Ans : C

13. What will the SWAP macro in the following program be expanded to on preprocessing? will the code compile?

```
#include<stdio.h>
#define SWAP(a, b, c)(c t; t=a, a=b, b=t)
int main()
{
    int x=10, y=20;
    SWAP(x, y, int);
    printf("%d %d\n", x, y);
    return 0;
}
```

- A. It compiles
- B. Compiles with an warning
- C. Not compile
- D. Compiles and print nothing

Ans: C

14. The maximum combined length of the command-line arguments including the spaces between adjacent arguments is

- A. 128 characters

- B. 256 characters
- C. 67 characters
- D. It may vary from one operating system to another

Ans: D

15. Point out the error in the program (in Turbo-C).

```
#include<stdio.h>
#define MAX 128
int main()
{
    const int max=128;
    char array[max];
    char string[MAX];
    array[0] = string[0] = 'A';
    printf("%c %c\n", array[0], string[0]);
    return 0;
}
```

- A. Error: unknown max in declaration/Constant expression required
- B. Error: invalid array string
- C. None of above
- D. No error. It prints A A

Ans: A

SECTION#2

1. A pointer is

- A. A keyword used to create variables
- B. A variable that stores address of an instruction
- C. A variable that stores address of other variable
- D. All of the above

Ans: C

2. What will be the output of the program assuming that the array begins at the location 1002 and size of an integer is 4 bytes?

```
#include<stdio.h>

int main()
{
    int a[3][4] = { 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 };
    printf("%u, %u, %u\n", a[0]+1, *(a[0]+1), (*(a+0)+1));

    return 0;
}
```

- A. 448, 4, 4
- B. 520, 2, 2
- C. 1006, 2, 2
- D. Error

Ans: C

3. Point out the compile time error in the program given below.

```
#include<stdio.h>

int main()
{
    int *x;
    *x=100;
    return 0;
}
```

- A. Error: invalid assignment for x
- B. Error: suspicious pointer conversion
- C. No error
- D. None of above

Ans: C

4. Which of the statements is correct about the program?

```
#include<stdio.h>

int main()
{
    int arr[3][3] = {1, 2, 3, 4};
    printf("%d\n", *(*(*(arr))));
    return 0;
}
```

- A. Output: Garbage value
- B. Output: 1
- C. Output: 3
- D. Error: Invalid indirection

Ans : D

5. What is the similarity between a structure, union and enumeration?

- A. All of them let you define new values
- B. All of them let you define new data types
- C. All of them let you define new pointers
- D. All of them let you define new structures

Ans: B

6. What will be the output of the program ?

```
#include<stdio.h>

int main()
{
    enum days {MON=-1, TUE, WED=6, THU, FRI, SAT};
    printf("%d, %d, %d, %d, %d, %d\n", ++MON, TUE, WED, THU, FRI, SAT);
    return 0;
}
```

- A. -1, 0, 1, 2, 3, 4

- B. Error
- C. 0, 1, 6, 3, 4, 5
- D. 0, 0, 6, 7, 8, 9

Ans: B

7. Point out the error in the program?

```
#include<stdio.h>

int main()
{
    struct bits
    {
        int i:40;
    }bit;

    printf("%d\n", sizeof(bit));
    return 0;
}
```

- A.4
- B. 2
- C. Error: Bit field too large
- D. Error: Invalid member access in structure

Ans: C

8. Which of the following statements correct about the below program?

```
#include<stdio.h>

int main()
{
    union a
    {
        int i;
        char ch[2];
    }
}
```

```
};  
union a u1 = {512};  
union a u2 = {0, 2};  
return 0;  
}
```

- 1: u2 CANNOT be initialized as shown.
- 2: u1 can be initialized as shown.
- 3: To initialize char ch[] of u2 '.' operator should be used.
- 4: The code causes an error 'Declaration syntax error'

- A. 1, 2
- B. 2, 3
- C. 1, 2, 3
- D. 1, 3, 4

Ans : C

9. What will be the output of the program?

```
public class X  
{  
    public static void main(String [] args)  
    {  
        try  
        {  
            badMethod();  
            System.out.print("A");  
        }  
        catch (Exception ex)  
        {  
            System.out.print("B");  
        }  
        finally
```

```
{  
    System.out.print("C");  
}  
System.out.print("D");  
}  
public static void badMethod() {}  
}
```

- A. AC
- B. BC
- C. ACD
- D. ABCD

Ans : C

10. switch(x)

```
{  
    default:  
        System.out.println("Hello");  
}
```

Which two are acceptable types for x?

1. byte
2. long
3. char
4. float
5. Short
6. Long

- A. 1 and 3
- B. 2 and 4
- C. 3 and 5
- D. 4 and 6

Ans : A

SECTION#4

1. Find $(7x + 4y) / (x-2y)$ if $x/2y = 3/2$?

- (a) 6
- (b) 8
- (c) 7
- (d) data insufficient

Ans: C

2. A man buys 12 lts of liquid which contains 20% of the liquid and the rest is water. He then mixes it with 10 lts of another mixture with 30% of liquid. What is the % of water in the new mixture?

3. Two trains move in the same direction at 50 kmph and 32 kmph respectively. A man in the slower train observes the 15 seconds elapse before the faster train completely passes by him. What is the length of faster train ?

- (a) 100m
- (b) 75m
- (c) 120m
- (d) 50m

Ans: B

4. Pipe A can fill a tank in 30 mins and Pipe B can fill it in 28 mins. If $3/4$ th of the tank is filled by Pipe B alone and both are opened, how much time is required by both the pipes to fill the tank completely ?

5. If on an item a company gives 25% discount, they earn 25% profit. If they now give 10% discount then what is the profit percentage.

- (a) 40%
- (b) 55%
- (c) 35%
- (d) 30%

Ans: D

6. A certain number of men can finish a piece of work in 10 days. If however there were 10 men less it will take 10 days more for the work to be finished. How many men were there originally?

- (a) 110 men
- (b) 130 men
- (c) 100 men
- (d) none of these

Ans: A

7. In simple interest what sum amounts of Rs.1120/- in 4 years and Rs.1200/- in 5 years ?

- (a) Rs. 500
- (b) Rs. 600
- (c) Rs. 800
- (d) Rs. 900

Ans: C

8. If a sum of money compound annually amounts of thrice itself in 3 years. In how many years will it become 9 times itself.

- (a) 6
- (b) 8
- (c) 10
- (d) 12

Ans: A

9. How many meshes are there in 1 square meter of wire gauge if each mesh is 8mm long and 5mm wide ?

- (a) 2500
- (b) 25000
- (c) 250
- (d) 250000

Ans B

10. $x\%$ of y is $y\%$ of ?

- (a) x/y
- (b) $2y$
- (c) x

(d) can,t be determined

Ans: C

11. The price of sugar increases by 20%, by what % should a housewife reduce the consumption of sugar so that expenditure on sugar can be same as before ?

(a) 15%

(b) 16.66%

(c) 12%

(d) 9%

Ans B

12. A man spends half of his salary on household expenses, $\frac{1}{4}$ th for rent, $\frac{1}{5}$ th for travel expenses, the man deposits the rest in a bank. If his monthly deposits in the bank amount 50, what is his monthly salary ?

(a) Rs.500

(b) Rs.1500

(c) Rs.1000

(d) Rs. 900

Ans :C

13. The population of a city increases @ 4% p.a. There is an additional annual increase of 4% of the population due to the influx of job seekers, find the % increase in population after 2 years ?

14. The ratio of the number of boys and girls in a school is 3:2 Out of these 10% the boys and 25% of girls are scholarship holders. % of students who are not scholarship holders.?

15. 15 men take 21 days of 8 hrs. each to do a piece of work. How many days of 6 hrs. each would it take for 21 women if 3 women do as much work as 2 men?

(a) 30

(b) 20

(c) 19

(d) 29

Ans: A

16. A cylinder is 6 cms in diameter and 6 cms in height. If spheres of the same size are made from the material obtained, what is the diameter of each sphere?

- (a) 5 cms
- (b) 2 cms
- (c) 3 cms
- (d) 4 cms

Ans :C

17. A rectangular plank $(2)1/2$ meters wide can be placed so that it is on either side of the diagonal of a square shown below.(Figure is not available)What is the area of the plank?

Ans :7*(2)1/2

18. The difference b/w the compound interest payable half yearly and the simple interest on a certain sum lent out at 10% p.a for 1 year is Rs 25. What is the sum?

- (a) Rs. 15000
- (b) Rs. 12000
- (c) Rs. 10000
- (d) none of these

Ans C

19. What is the smallest number by which 2880 must be divided in order to make it into a perfect square ?

- (a) 3
- (b) 4
- (c) 5
- (d) 6

Ans: C

20. A father is 30 years older than his son however he will be only thrice as old as the son after 5 years what is father,s present age ?

- (a) 40 yrs
- (b) 30 yrs
- (c) 50 yrs
- (d) none of these

Ans: A