Section - A

(Each question carries 1 marks)

Q1: What is the standard library function used to delete a file in C? **a. remove()**

a) remove() b) delete()

c) erase() d) unlink()

Q2: What is the syntax to open a file in C?

a) fopen("filename", "mode"); b) fopen("mode", "filename");

c) open("filename", "mode"); d) open("mode", "filename");

Q3: which is the correct statement about following int* p1,p2;

a. p1 and p2 both are pointer of integer type
b. Syntax error
c. **p1 is pointer to int but p2 is integer variable**
d. Both are integer variable Ans = c

Q4: what will be the output of following code

```
#include<stdio.h> int main(){  int arr[] = {1,2,3,4,5};

 int *ptr;  ptr = &arr[4];  printf("%d",*(ptr-3));
}
```

a) 2 b) 1

c) 4 d) 5

Q5: What is the scope of a variable declared with "register" storage class?

a) Global Scope **b) Local to the block in which it is defined**

c) Same as External storage class d) None of the above

Q6: Which of the following keywords is used to define an enum in C programming?

a) struct **b) enum** c)typedef d)union

Q7: Which of the following statements is true about the size of a union in C programming?

a. The size of a union is the sum of the sizes of all its members.
b. **The size of a union is the size of its largest member.**
c. The size of a union is the size of its smallest member.
d. The size of a union is always 4 bytes. Ans = b

Q8: which is valid pointer arithmetic

a) #include<stdio.h> int main(){

int a = 5; int *ap = &a; ap = ap++;

printf("%p",ap);

}

b) #include<stdio.h> int main(){ int a = 5; int *ap = &a; ap = ap*3; printf("%p",ap);
}

c)

#include<stdio.h> int main(){ int a = 5;
int *ap = &a; ap = ap+ap; printf("%p",ap);
}

d)
#include<stdio.h> int main(){ int a = 5; int *ap = &a; ap = ap**ap; printf("%p",ap);
}

Ans = a

Q9: what will be the output of following code

#include<stdio.h> #include<strings.h> int main(){ char str1[10] = "world"; char str2[10] = "world"; if(strcmp(str1, str2) == 0) printf("Equal"); else printf("Not equal");
}

a) Equal b) Not equal

c) compiler error d) no output

Q10. Which of the following data types is used to represent unsigned integers in C programming?
a) short b) long c) int **d) unsigned int**

Q11: Which mode in fopen() function is used to read data from a file in binary mode?
a) "r" b) "w" c) "a" d)**"rb"**

Q12: How do you allocate memory for a pointer in C?

a. **By using the malloc() function**
b. By using the free() function
c. By using the realloc() function
d. None of the above

Q13: what will be the output of following code

```
#include<stdio.h>
int main()
{
 int arr[6] = {1,2,3,4,5,6};
 int *ptr;
 ptr = &arr[4];
 printf("%d",*(ptr-4));
}
```

a) 2 **b) 1**

c) 4 d) 5

Q14 What is the function used to close a file in C?

a. **fclose()**
b. close()
c. exit()
d. endfile()

Q15 What is the return type of fopen() function in C?

a. int
b. char
c. void
d. **FILE***

Q16 What is the purpose of a double pointer in C?

a. **To store the address of another pointer**
b. To store a two-dimensional array
c. To pass an array to a function
d. None of the above

Q17 What is the purpose of the realloc() function in C?

a. To allocate memory
b. To free memory
c. **To reallocate memory and change its size**
d. None of the above

Q18 Which operator is used to access members of a union in C programming?

a) . b) -> c) :: d) ;

Q19: which of the following is valid operation

a)

```
#include<stdio.h>

int main(){

int x[5] = {1,2,3,4,5};
 x++;
 printf("%d",*x);
}
```

b)

```
#include<stdio.h>
int main()
{
int x[5] = {1,2,3,4,5};
x*3;
printf("%d",*x);
}
```

c)

```
#include<stdio.h>

 int main(){

int x[5] = {1,2,3,4,5};

  int *xp =x;   xp++;

printf("%d",*xp);

}
```

d)

```
#include<stdio.h>

 int main(){
```

```
int x[5] = {1,2,3,4,5};

 int *xp =x;

xp*= *xp;

printf("%d",*xp);

}
```

Q20 If A is an array of 60 characters, then the value assigned to A through the statement scanf("%s",S) with input 56789 would be

a) "56789"

b) %s cannot be used for reading in values of A

c) nothing since 56789 is an integer

d) A is an illegal name for string

Q21 Which of the following 'C' type is not a primitive data structure?

a) int

b) float

c) char

d) none of these

Q22 An external variable

a) is globally accessible by all functions

b) has a declaration

c) will be initialized to 0 if not initialized

d) all of these

Q23 An identifier in the C program can't start with -------?

a) An underscore

b) Upper case alphabets

c) A digit

d) Lower case alphabets

Q24. Which loop runs at least one time during the execution of the program?

a) while

b) do-while

c) for

d) All of the above

Q25 Set of values of the same type, which have a single name followed by an index is called

a) array

b) union

c) function

d) structure

Q26. In the loop structure, a logical expression is checked at the ……of the loop.

a) first

b) second

c) middle

d) end

Q27 If an array is used as a function argument, the array is passed

a) by value

b) by name

c) by reference

d) None of the above

Q28 Which of the following is false in C?

a) Variable names can contain a digit

b) Keywords can be used as variable names

c) Variable names do not contain a blank space

d) Capital letters can be used in variables

Q29 Which function is used to count the number of characters in a string:

a) len()

c) chlen()

b) strlen()

d) sizeof()

Q30. When a program is successfully terminated, then the value returns to the operating system by the program is X,what is the value of X?

a) 1

b) -1

c) 0

d) A program does not return any value to the operating system.

Q31. C programs are converted into machine language with the help of

a) Editor

b) Operating system

c) compiler

d) None of the above

Q32. What is right way to Initialization array?

a) int num[6] = { 22, 40, 42, 85, 45, 50 } ;

b) int n{} = { 29, 94, 120, 75, 45, 59 } ;

c) int n{6} = { 29< 42< 112 } ;

d) int n(6) = { 12, 87, 19, 67, 90, 35 } ;

Q33. What is the right way to access value of structure variable book{ price, page }?

a) printf("%d%d", price.book, page.book);

b) printf("%d%d"< price::book< page::book);

c) printf("%d%d", price>book, page>book);

d) printf("%d%d", book.price, book.page);

Q34 File manipulation functions in C are available in which header file?

a) streams.h

b) stdlib.h

c) stdio.h

d) files

Q35 Which of the following header file is required for strcpy() function?

a) String.h

b) string.h

c) Strings.h

d) file.h

Q36 . Which of the following is not a valid C identifier?

a) my_variable

b) MyVariable

c) 1variable

d) _variable

Q37 Recursion has the following properties :

a) Used with loops only.

b) Terminates when the base case becomes false.

c) Every recursive call needs extra space in the stack memory.

d) Every iteration does not require any extra space.

Q38. Which is the false statement about typedef in c?

a) This keyword is used to redefine the name of an already existing variable.

b) You cannot use typedef to give a name to your user defined data types.

c) It can be used with arrays to declare any number of variables.

d) B and C

Q39. How can Ram open a text file in read and write modes in c?

a) fopen("demo.txt","a+");

b) fopen("demo.txt", "ab");

c) fopen("demo.txt", "wb+");

d) fopen("demo.txt", "ab+");

Section - B

(Each question carries 2 marks)

Q1: Which function is used to write a single character to a file in C?

a) fgetc()

b) fgets()

c) fputc()

d) fputs()

Q2: What will be the output of the following program:

```
#include<stdio.h>
void increment(int *i)
{
   (*i)++;

}

void printValue(int x)

{

 printf("%d ", x++);

} int main()
{
   int i = 4;
increment(&i);
 printValue(i++);
increment(&i);
printValue(++i);
return 0;
}
```

a) 4 7 **b) 5 8**

c) 6 7 d) 6 8

Q3: Which of the following keywords is used to skip to the next iteration of a loop in C programming?

a) exit

b) break

c) continue

d) return

Q4: What is the maximum number of conditions that can be checked in a single if-else statement in C programming?

a) One b)Two c)Three **d) There is no maximum limit**

Q5: What is a string in C programming?

a) A single character **b) An array of characters** c) A struct d) none of the above

Q6. What is the output of the following code snippet?

```
int a =3;
 int b = 2;
int *p = &a;
int *q = &b;
```

```
int *r = p;
printf("%d", *r + *q);
```

a) 4 b) 6 **c) 5** d) Compiler error

Q7. What is the output of the following code snippet?

```
int a[3] = {10, 20, 30};
 int *p = a;
printf("%d", *(p+2));
```

a) 10 b) 20 **c) 30** d) Compiler error

Q8. What is the purpose of typedef in a struct declaration?

a) To create an alias for the struct type
b) To create a new struct member
c) To declare a new struct variable
d) To create a new struct type with different members

Q9. What is the value of arr[2][3] in the following 2D array declaration:

```
int arr[4][5] = {{1, 2, 3, 4, 5}, {6, 7, 8, 9, 10}, {11, 12, 13, 14, 15}, {16, 17, 18, 19, 20}};
```

a) 14 b) 18 c) 9 d) 5

Q10. Which of the following functions is used to compare two strings?

a) strlen() **b) strcpy()**
c) strcmp() d) unlink()

Q11: what will be output of following program

```
#include<stdio.h>
int main(){
 int arr[] = {1,2,3,4,5};
*arr = *arr+3 + *(arr+3);
 printf("%d",arr[0]);
}
```

a) 1 b) 9
c) 8 d) 10

Q12: What is the output of the following code snippet?

```
char str[] = "World"; char *p = str;
printf("%c\n", *p);
```

a. **W**
b. o
c. r
d. l

Q13: What is the output of the following code?

```
#include <stdio.h>

struct point {

   int x;    int y;
};
 int main()

{    struct point p1 = {10, 20};

  struct point *ptr = &p1;

 printf("X coordinate: %d\n", ptr->x);

printf("Y coordinate: %d\n", ptr->y);

  return 0;

}
```

a. **X coordinate: 10 Y coordinate: 20**
b. X coordinate: 20 Y coordinate: 10
c. There is a compilation error.
d. X coordinate: 30 Y coordinate: 10

Q14 What will be the output of the following code?

```
 #include <stdio.h>

enum days_of_week {

   MON,

   TUE,

   WED,

   THU,

   FRI,

   SAT,

   SUN
```

```
};

int main()

{

 enum days_of_week today = FRI;

printf("Today is %d day of the week.\n", today);

return 0;

}
```

a. **Today is 4 day of the week.**
b. Today is 5 day of the week.
c. Today is 6 day of the week.
d. Today is FRI day of the week.

Q15: Which storage class is used to declare a variable that retains its value between function calls?
a) auto b) **static** c) register d) extern

Q16 What is the purpose of the strcat() function in C?

a) To find the length of a string

b) To copy a string to another string

c) To concatenate two strings

d) To compare two strings

Q17 What is output of following code ?

```
typedef struct {
int x;   int y;
} Point;

Point p = {3, 4};
 printf("(%d, %d)\n", p.x, p.y);
```

a. **(3, 4)**
b. (4, 3)
c. Error
d. None of the above

Q18. Which of the following is the correct syntax for defining a union in C?

a) union myUnion { int x; float y; }; b) myUnion { int x; float y; } union;

c) struct { int x; float y; } union myUnion; **d) union { int x; float y; } myUnion;**

Q19. Which of the following describes pass-by-value parameter passing?

a) The actual parameter is passed as a copy to the function

b) The actual parameter is passed as a reference to the function

c) The formal parameter is passed as a copy to the function

d) The formal parameter is passed as a reference to the function

Q20. What will be output of following code

```
int s = 10, t = 5;
if ((s > 15 || t > 15) && s + t == 15) {
printf("Both conditions are true.");
}
else {
   printf("At least one condition is false.");
}
```

a. Both conditions are true.
b. **At least one condition is false.**
c. There is a compilation error.
d. error

Q21.What will be the output of the given code below

```
int main() {
   int n;
   char N;
   N = 'N';
   n = 'n' - N;
   printf("%d", n);
   return 0;
}
```

a) -32

b) 32

c) 0

d) Error

Q22 What will be the output of the given code below

```
int main() {
   int n;
   n = - -22;
   printf("%d", n);
   return 0;
}
```

a) 22

b) -22

c) 21

d) Error

Q23.What is the output of the following code snippet?

```
#include <stdio.h>
int main() {
   int a = 10, b = 20;
   printf("%d", a > b ? a : b);
   return 0;
}
```

a) 10

b) 20

c) Garbage value

d) Runtime error

Q24 What is the output of the following code?

```
#include <stdio.h>
int main() {
   int x = 10, y = 20;
   int *p1 = &x, *p2 = &y;
   int temp = *p1;
   *p1 = *p2;
   *p2 = temp;
   printf("%d %d", x, y);
   return 0;
}
```

a) 10 20

b) 20 20

c) 10 10

d) 20 10

Q25 What is the output of the following code?

```
#include <stdio.h>
int main() {
    int a[] = {10, 20, 30};
    int *p = a;
    printf("%d", *p++);
    return 0;
}
```

a) 10

b) 20

c) 30

d) None

Q26. What will be the output of the below code ?

```
#include<stdio.h>
struct student
{
  char name[50];
  int roll;
  char grade;
  int marks[3];
  float avg;
};
int main()
{
   struct student stu;
   stu={.marks[0]=88,.marks[1]=87,.marks[2]=90};
   printf("%d",stu.marks[2]);
   printf("%d",stu.marks[1]);
   printf("%d",stu.marks[0]);
```

```
    return 0;
}
```

a) 908788

b) 888790

c) 878890

d) Compiling time error.

Q27. What will be the output of the code?

```
#include<stdio.h>
enum subject { hindi=10, english, maths=10, computer };
int main()
{
    enum subject name;
    name = english;
    printf("%d",name);
    name = computer;
    printf("%d",name);
return 0;
}
```

a) 24

b) 1010

c) 13

d) 1111

Q28. What will be the output of the code?

```
union student
{
   int roll;
   char grade;
   float avg;
   double val;
};
int main()
{
```

```
    stu.roll=10;
    stu.grade='B';
    stu.avg=78.32;
   printf("%.2f\n",stu.avg);
   return 0;
}
```

a) 78.32

b) 78.3234

c) 78.322

d) Compiling time error.

Q29. What will be the output of the below code ?

```
#include <stdio.h>
int fn(int base, int a)
{
   if (a != 0)
   return (base * fn(base, a - 1));
   else
   return 1;
}
int main()
{
   int base, a, result;
   base=3;
   a=2;
   result = fn(base, a);
   printf("%d",result);
   return 0;
}
```

a) 3

b) 6

c) 9

d) 27

Q30. What will be the output of the given code?

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

```
#define fun(a,b) a*b
int main()
{
   int a=9;
   int b=9;
   printf("%d\n",fun(a,b));
   return 0;
}
```

a) 9*9

b) 81

c) 0

d) Error

Q31.What is the output of the following code?

```
int main()
{
int x=10;
do
{
   printf("%d ", x);
}
while(x++ < 15);
return 0;
}
```

a)10 11 12 13 14 15

b)11 12 13 14 15 16

c)10 11 12 13 14

d)11 12 13 14 15

Q32 What is the output of the following code?

```
int main()
{
   char str[] = "Hello, world*";
```

```
    printf("%s", str + 7);
return 0;
}
```

a) Hello,

b) world*

c) , world*

d) llo, world*

Q33.What is the output of the following code?

```
int main()
{
    int x = 5;
    switch (x)
{
    case 1:
        printf("Ram");
        break;
    case 2:
        printf("Mohan");
        break;
    default:
        printf("Ravi");
return 0;
}
```

a) Ram

b) Mohan

c) Ravi

d) None of the above

Q34 What is the output of the following code?

```
int main()
{
    int x = 1;
    for (int i = 1; i < 5; i++)
    {
```

```
        x += i;
    }
    printf("%d", x);
return 0;
}
```

a) 9

b) 10

c) 11

d) none

Q35 What is the output of the following code?

```
int main()
{
    int a = 5, b = 10;
    if (a > 0 && b++ > 10)
    {
        printf("A");
    }
    else
    {
        printf("B");
    }
printf("%d", b);
return 0;
}
```

a) A10

b) B10

c) A11

d) B11

Q36 Is the given structure a valid structure in C?

```
    struct student
    {
                        char name[50]="Mohan";
                        int roll = 11;
```

```
        char grade ='C';
        int marks[3] ={ 90,89,99};

}stu;
```

a) No

b) Yes

c) Structure members cannot be initialized with declaration in C.

d) A and C

Q37 Which is the false statement about typedef in c?

a) This keyword is used to redefine the name of an already existing variable.

b) You cannot use typedef to give a name to your user defined data types.

c) It can be used with arrays to declare any number of variables.

d) B and C

Q38 The total memory size occupied by the below union is?

```
union student
{
        int roll;
        char grade;
        float avg;
        int arr[4];
}stu;
```

a) 19 bytes

b) 29 bytes

c) 13 bytes

d) 16 bytes

Q39 Which is the true fact about enum in c?

a) Two enum names can have same value.

b) We can assign values to some name in any order.

c) The values assigned to the enum names must be integral constants and character constants.

d) A and B

Q40 What will be the output of the given code?

```
enum friends { ram, ravi, Raja=10, ramesh };
 int main()
 {
        enum friends name;
        name = ramesh;
        printf("%d\n",name);
        return 0;
}
```

a) 3

b) 4

c) 11

d) None of the above