

1) What is a String in C Language.?

- A) String is a new Data Type in C
- B) String is an array of Characters with null character as the last element of array.
- C) String is an array of Characters with null character as the first element of array
- D) String is an array of Integers with 0 as the last element of array.

Answer B

2) Choose a correct statement about C String.

```
char arr[ ]="Hello..!";
```

- A) Character array, arr is a string.
- B) arr has no Null character at the end
- C) String size is not mentioned
- D) String can not contain special characters.

Answer A

Explanation:

It is a simple way of creating a C String. You can also define it as below. \0 is mandatory in this version. `char arr[] = {'h','e','l','l','o','\0'};`

3) What is the Format specifier used to print a String or Character array in C Printf or Scanf function.?

- A) %c
- B) %C
- C) %s
- D) %w

Answer C

Explanation:

```
char arr[]="Hello..!";  
printf("%s",arr);
```

4) What is the output of C Program with Strings.?

```
int main()  
{ char arr[ ]="Programming Language";  
  printf("%s",arr);  
  return 0;  
}
```

- A) P
- B) Programming Language
- C) Programming
- D) Compiler error

Answer B

Explanation:

%s prints the character array in one go.

5) What is the output of C Program with Strings.?

```
int main()
{
    char str[ ]={'g','l','o','b','e'};
    printf("%s",str);
    return 0;
}
```

- A) g
- B) globe
- C) globe\0
- D) None of the above

Answer D

Explanation:

Notice that you have not added the last character \0 in the char array. So it is not a string. It can not know the end of the string. So it may print a string with some garbage values at the end.

6) What is the output of C Program with Strings.?

```
int main()
{ char str[]={ 'g','l','o','b','e','\0'};
  printf("%s",str);
  return 0;
}
```

- A) g
- B) globe
- C) globe\0
- D) Compiler error

Answer B

Explanation:

Adding a NULL or \0 at the end is the correct way of representing a C string. You can simply use char str[]="globe". It is the same as above.

7) How do you convert this char array to a string.?

```
char str[ ]={'g','l','o','b','y'};
```

- A) str[5] = 0;
- B) str[5] = '\0'
- C) str[]={'g','l','o','b','y','\0'};
- D) All the above

Answer D

8) What is the output of C Program with arrays.?

```
int main()
{ char str[ ]={"C","A","T","\0"};
  printf("%s",str);
  return 0;
}
```

- A) C
- B) CAT
- C) CAT\0
- D) Compiler error

Answer D

Explanation:

Yes. You can not use Double Quotes " to represent a single character. The correct way is 'C' not "C". You should use Single Quotes around a single-character constant.

9) What is the maximum length of a C String.?

- A) 32 characters
- B) 64 characters
- C) 256 characters
- D) None of the above

Answer D **Explanation:**The maximum size of a C String is dependent on implemented PC memory. C does not restrict C array size or String Length.

10) What is the output of C program with strings.?

```
int main()
{ char str1[ ]="JOHN";
  char str2[20];
  str2= str1;
  printf("%s",str2);
  return 0;
}
```

- A) JOHN
- B) J
- C) JOHN\0
- D) Compiler error

Answer D

Explanation:

You can not assign one string to the other. It is an error. "error: assignment to expression with array type". You must use strcpy() function.

11) What is the output of C Program with arrays.?

```
int main()
{
    char str[25];
    scanf("%s", str);
    printf("%s",str);
    return 0;
}
//input: South Africa
```

- A) South
- B) South Africa
- C) S
- D) Compiler error

Answer A

Explanation:

SCANF can not accept a string with spaces or tabs. So SCANF takes only South into STR.

12) What is the output of C Program with strings.?

```
int main()
{ char str[2];
  int i=0;
  scanf("%s", str);
  while(str[i] != '\0')
  {
    printf("%c", str[i]);
    i++;
  }
  return 0;
}
//Input: KLMN
```

- A) KL
- B) KLMN
- C) Compiler error
- D) None of the above

Answer B

Explanation:

It always overwrites the next memory locations of the array. It is your responsibility to check the bounds. Scanf automatically adds a '\0' at the end of the entered string.

13) What is the output of C Program with a String Pointer.?

```
int main()
{ char country[ ]="GUNTUR";
  char *ptr;
  ptr=country;
  while(*ptr != '\0')
  {
    printf("%c", *ptr);
    ptr++;
  }
  return 0;
}
```

- A) G
- B) GUNTUR
- C) Compiler error
- D) None of the above

Answer B

Explanation:

*ptr != '\0' is the main part of traversing a C String.

14) How do you accept a Multi-Word Input in C Language.?

- A) scanf()
- B) gets()
- C) getc()
- D) finds()

Answer B

Explanation:

Yes. gets(str) fills the array str with the input given by the user.

15) Choose a correct C Statement about Strings.

- A) PRINTF is capable of printing a multi word string.
- B) PUTS is capable of printing a multi word string.
- C) GETS is capable of accepting a multi word string from console or command prompt
- D) All the above

Answer D

16) What is the output of C Program with String Pointers.?

```
int main()
{
    char *p1 = "GOAT";
    char *p2;
    p2 = p1;
    printf("%s", p2);
}
```

- A) G
- B) GOAT
- C) Compiler error
- D) None of the above

Answer B

Explanation:

Yes. You can assign one String pointer to another. But you can not assign a normal character array variable to another like STR2 = STR1. It is an error.

17) What is the output of C Program with String arrays.?

```
int main()
{ char *p1 = "GOAT";
  char *p2;
  p2 = p1;
  p2="ANT";
  printf("%s", p1);
}
```

- A) ANT
- B) GOAT
- C) G
- D) A

Answer B

Explanation:

*p1 and *p2 are completely pointing to different memory locations. So, p1 value is not touched.

18) What is the output of C Program with String Arrays.?

```
int main()
{
    char p[ ] = "TECHNOLOGY";
    int i=0;
    while(p[i] != '\0')
    {
        printf("%c",*(p+i));
        i++;
    }
}
```

- A) T
- B) TECHNOLOGY
- C) Compiler error
- D) None of the above

Answer B

Explanation:

Notice the usage of $*(p+i)$. Remember that, $p[i] == *(p+i) == *(i+p) == i[p]$

19) What is the ASCII value of NULL or $\backslash 0$.?

- A) 0
- B) 1
- C) 10
- D) 49

Answer A

Explanation: ASCII value of NULL character is ZERO 0.

20) Choose a correct statement about C String.

- A) A string is a group of characters enclosed by double quotes.
- B) If a string is defined with double quotes, NULL is automatically added at the end.
- C) Size of a string is without counting NULL character at the end
- D) All the above

Answer D

21) A C string elements are always stored in.?

- A) Random memory locations
- B) Alternate memory locations
- C) Sequential memory locations
- D) None of the above

Answer C

22) What is the output of C program with strings.?

```
int main()
{
    char var='b';
    printf("%d ", sizeof("a"));
    printf("%d ", sizeof('b'));
    printf("%d ", sizeof(10));
    printf("%d ", sizeof(var));
}
//int size is 2 bytes
```

- A) 1 1 1 1
- B) 2 1 2 1
- C) 2 2 2 1
- D) 2 2 2 2

Answer C

Explanation:

sizeof('b') is 2 because 'b' is converted to ASCII number which is integer. sizeof(var) is printed as expected. size("a") is two because NULL occupies 1 byte.

23) What is the output of C program with strings.?

```
int main()
{
    char str[]="ELON MUSK";
    int i=0;
    while(str[i] != '\0')
    {
        printf("%c",str[i]);
        i++;
    }
    return 0;
}
```

- A) EEEE EEEE
- B) ELON MUSK
- C) Compiler error
- D) None of the above

Answer B

Explanation:

Yes. You can check for the end of a string with ASCII ZERO 0. ASCII value of NULL or \0 is ZERO.

24) What is the output of C program with strings.?

```
int main()
{
    char str[ ]="ANDAMAN";
    int i=0;
    while(str[i] != '\0')
    {
        printf("%c",str[i]);
        i++;
    }
    return 0;
}
```

- A) AAAAAAA
- B) ANDAMAN
- C) Compiler error
- D) None of the above

Answer B

25) What is the output of C program with strings.?

```
int main()
{ char str[3]="SUNDAY";
  printf("%s",str);
}
```

- A) SUN
- B) SUNgarbagevalues
- C) compiler error
- D) None of the above

Answer B

Explanation:

You get C warning: initializer-string for an array of chars is too long

26) Choose a correct C statement about String functions.?

- A) strrev("abcD") returns Dcba.
- B) strcmp("abc", "bcd") returns a negative number
- C) strcmp("234", "123") returns a positive number
- D) All the above

Answer D

27) Choose a correct C statement about String functions.?

- A) toupper('a') returns A
- B) tolower('D') returns d.
- C) strcmp("123","12345") returns a negative number
- D) All the above

Answer D

28) What is the output of C program.?

```
int main()
{
    char str1[]="JAMES,";
    char str2[15]="BOND ";
    strcat(str2,str1);
    printf("%s",str2);
    printf("%s",str1);
}
```

- A) JAMES BOND,JAMES,
- B) JAMES,JAMES,
- C) BOND JAMES,JAMES,
- D) None of the above

Answer C

Explanation:

Here str1 is not affected by strcat function. STRCAT(destination, source).

29) What is the output of C program.?

```
int main()
{
    char str1[] = "FIRST";
    char str2[20];
    strcpy(str2,str1);
    printf("%s %s ",str1,str2);
    printf("%d", (str1!=str2));
    printf("%d", strcmp(str1,str2));
    return 0;
}
```

- A) FIRST FIRST 0 0
- B) FIRST FIRST 1 1
- C) FIRST FIRST 1 0
- D) FIRST FIRST 0 1

Answer C**Explanation:**

STRCPY copies the STR1 value to another memory location pointed by STR2. Only STR1 and STR2 values are the same but not memory locations.

30) What is the output of C program with an array of pointers to strings.?

```
int main()
{
    char *code[ ]={"IN","USA","K"};
    printf("%s", code[1]);
    return 0;
}
```

- A) IN
- B) U
- C) USA
- D) Compiler error

Answer C**Explanation:**

It is an array of arrays. Using an array of pointers to strings, we can save memory. Different strings can have different lengths. Otherwise, the max length of any element should be the length of all elements. It wastes space.

31) What is the output of C program with String arrays.?

```
int main()
{
    char code[3][4]={"IN","USA","K"};
    printf("%s", code[1]);
    return 0;
}
```

- A) IN
- B) USA
- C) K
- D) Compiler error

Answer B**Explanation:**

Here, we have not used pointers to strings. So a total of $3 \times 4 = 12$ bytes is allocated. Using a pointer to strings, we can allocate just $3 + 4 + 2 = 9$ bytes. Extra byte stores NULL or $\backslash 0$. USA+null = 4 characters.

32) What is the output of C program with an array of pointers to strings.?

```
int main()
{
    char *code[2];
    code[0]= (char *)malloc(4);
    strcpy(code[0], "IND");
    printf("%s", code[0]);
    return 0;
}
```

- A) I
- B) IN
- C) IND
- D) Compiler error

Answer C

Explanation:

If you use a pointer to string instead of char str[], you should use malloc() or calloc() to allocate memory and then write some data like "IND" into it. Otherwise, your output will be unexpected.

33) What is the output of C program with strings.?

```
int main()
{
    char *code="JUMPER";
    if(code[6]=='\o')
    {
        printf("SUMMER");
    }
    else
    {
        printf("WINTER");
    }
    return 0;
}
```

- A) SUMMER
- B) WINTER
- C) Compiler error
- D) None of the above

Answer B

Explanation:

Use '\0' to get end of string.

34) What is a structure in C language.?

- A) A structure is a collection of elements that can be of same data type.
- B) A structure is a collection of elements that can be of different data type.
- C) Elements of a structure are called members.
- D) All the above

Answer D**Explanation:**

```
struct insurance
```

```
{
  int age;
  char name[20];
}
```

35) What is the size of a C structure.?

- A) C structure is always 128 bytes.
- B) Size of C structure is the total bytes of all elements of the structure.
- C) Size of C structure is the size of the largest element.
- D) None of the above

Answer B**Explanation:**

Individually calculate the sizes of each member of a structure and make a total to get Full size of a structure.

36) What is the output of C program with structures.?

```
int main()
{
  structure hotel
  {
    int items;
    char name[10];
  }a;
  strcpy(a.name, "TAJ");
  a.items=10;
  printf("%s", a.name);
  return 0;
}
```

- A) TAJ
- B) Empty string
- C) Compiler error
- D) None of the above

Answer C

Explanation:

Keyword used to declare a structure is STRUCT not structURE in lowercase i.e struct.

37) Choose a correct statement about C structures.

- A) Structure elements can be initialized at the time of declaration.
- B) Structure members can not be initialized at the time of declaration
- C) Only integer members of the structure can be initialized at the time of declaration
- D) None of the above

Answer B

Explanation:

```
struct book
{
    int SNO=10; //not allowed
};
```

38) Choose a correct statement about C structure elements.?

- A) Structure elements are stored on random free memory locations
- B) structure elements are stored in register memory locations
- C) structure elements are stored in contiguous memory locations
- D) None of the above.

Answer C

39) What is the output of C program with Structure pointer in TurboC.?

```
int main()
{
    struct books{
        int pages;
        char str[4];
    }*ptr;
    printf("%d",sizeof(ptr));
    return 0;
}
```

- A) 2
- B) 6
- C) 7
- D) 8

Answer B

Explanation:

Memory reserved will be the size of sum of individual elements.

40) What is the need for a File when you can store anything in memory.?

- A) Memory (RAM) is limited in any computer.
- B) A file is stored on Hard Disk which can store Gigabytes of data.
- C) File stored on Hard Disk is safe even if PC is switched off. But Memory or RAM contents are cleared when PC is off.
- D) All the above

Answer D

41) What is the keyword used to declare a C file pointer.?

- A) file
- B) FILE
- C) FILEFP
- D) filefp

Answer B

Explanation:

FILE *fp;

42) What is a C FILE data type.?

- A) FILE is like a Structure only
- B) FILE is like a Union only
- C) FILE is like a user define int data type
- D) None of the above

Answer A

Explanation:

Yes. FILE type pointer eg. FILE *fp holds an address of a C Structure that can store type of file operation, memory location of current read and next read and other useful information.

43) Where is a file temporarily stored before read or write operation in C language.?

- A) Notepad
- B) RAM
- C) Hard disk
- D) Buffer

Answer D

Explanation:

Yes. A Buffer is like an empty bucket that is filled with information so that direct read write operation on hard disk is avoided for better performance.

44) Choose a correct statement about C file operation program.?

```
int main()
{
    FILE *fp;
    char ch;
    fp=fopen("readme.txt","r");
    while((ch=fgetc(fp)) != EOF)
    {
        printf("%c",ch);
    }
}
```

- A) FOPEN opens a file named readme.txt in Read Mode ("r).
- B) EOF is End Of File. ch==EOF checks for end of file and while loop stops or exits.
- C) FGETC(fp) is a function that returns one character and cursor goes to next character.
- D) All the above

Answer D

Explanation:

Inside while loop, we have not done any increment operations like i++. Because fgetc() function takes care of returning one by one character from file.

45) What is the need for closing a file in C language.?

- A) fclose(fp) closes a file to release the memory used in opening a file.
- B) Closing a file clears Buffer contents from RAM or memory.
- C) Unclosed files occupy memory and PC hangs when on low memory.
- D) All the above

Answer D

46) If a FILE pointer is NULL what does it mean.?

```
FILE *fp;
fp=fopen("abc.txt","w");
```

- A) Unable to open a file named abc.txt
- B) abc.txt is not available on disk
- C) Hard disk has hard ware problems.
- D) All the above

Answer D

47) Choose a correct statement about FGETS in C program.?

```
int main()
{
    FILE *fp;
    char str[80];
    fp=fopen("readme.txt","r");
    while(fgets(str,80,fp) != NULL)
    {
        printf("%s",str);
    }
    fclose(fp);
}
```

- A) str in fgets() is a like a user buffer that can store 80 characters each time
- B) FGETS returns null if no characters are left
- C) fgets() reads content from File. FPUS writes content back to File.
- D) All the above

Answer D

Explanation:

Here "r" is File open mode. eg. "w" is used for writing a file.

48) Choose a correct statement about C file "r" mode operation using fopen.

`fopen("abc.txt","r");`

- A) If the file abc.txt is found, fopen returns a FILE pointer.
- B) If the file abc.txt is not found, fopen returns NULL or 0.
- C) File abc.txt is only opened in Read Mode. Now write operation is performed.
- D) All the above

Answer D

49) Choose a correct statement about File Write Mode "w".

`File *fp;`

`fp=fopen("abc.txt","w");`

- A) If the file abc.txt is not found File abc.txt is created on disk.
- B) If the file abc.txt is found, fopen() returns a FILE pointer as usual. Every time, contents of abt.txt are overwritten in "w" mode.
- C) Read operation is not allowed in "w" mode.
- D) All the above

Answer D

50) Choose a correct statement about C File Mode "w+".

FILE *p;

p=fopen("abc.txt","r+");

- A) r+ mode allows reading of existing contents of file abc.txt only if file is found.
- B) If file is not found, NULL is returned by fopen().
- C) You can read existing contents, edit existing content and add new content.
- D) All the above

Answer D

51) Choose a correct statement about C file mode "a".

FILE *fp;

fp=fopen("abc.txt","a");

- A) "a" is for append operation. You can append or add new content to the existing contents.
- B) If file is not found, new file is created.
- C) You can not write read file contents.
- D) All the above

Answer D

52) Choose a correct statement about C file mode "a+".

FILE *fp;

fp=fopen("abc.txt","a+");

- A) a+ mode always appends new data to the end of existing content
- B) a+ mode creates a new file if not found or existing.
- C) a+ mode allows reading also. mode "a" allows only appending not reading.
- D) All the above

Answer D

53) Choose a correct statement about opening a file in binary mode for reading.

FILE *fp;

fp=fopen("abc.txt","rb");

- A) rb mode opens the file in binary mode
- B) Binary mode is just reading or writing in bytes instead of integers, characters or strings.
- C) Binary mode saves memory occupied by contents.
- D) All the above

Answer D

54) What is the syntax for writing a file in C using binary mode.?

FILE *fp;

- A) fp=fopen("abc.txt","wr");
- B) fp=fopen("abc.txt","wb");
- C) fp=fopen("abc.txt","wbin");
- D) fp=fopen("abc.txt","b");

Answer B

55) What are the C functions used to read or write a file in Text Mode.?

- A) fprintf(), fscanf()
- B) fread(), fwrite()
- C) fprint(), fscan()
- D) read(), write()

Answer A

Explanation:

You can even use fputs(). Only strings can be read or write instead of integers, float or characters.

56) What are the C functions used to read or write a file in Binary Mode.?

- A) fprintf(), fscanf()
- B) fread(), rwrite()
- C) readf(), writef()
- D) printf(), scanf()

Answer B

Explanation:

fwrite(pointer, size, count, filepointer); //count=1 usually

57) Choose the correct syntax for FSCANF and FPRINTF in c language.?

- A) fprintf("format specifier",variables, fp);
fscanf("format specifier",variables, fp);
- B) fprintf(fp,count,"format specifier",variables);
fscanf(fp,count,"format specifier",variables);
- C) fprintf(fp,"format specifier",variables);
fscanf(fp,"format specifier",variables);
- D) None of the above

Answer C

Explanation:

You can check for end of file contents using EOF.

fscanf() != EOF
fread() != EOF
fgetc() != EOF
fgets() != NULL
fseek(fp,bytescount,SEEK_SET)
moves pointer to that count location.

58) Choose the correct statement about Functions in C Language.

- A) A Function is a group of c statements which can be reused any number of times.
- B) Every Function has a return type.
- C) Every Function may no may not return a value.
- D) All the above.

Answer D

59) Choose a correct statement about C Language Functions.

- A) A function name can not be same as a predefined C Keyword.
- B) A function name can start with an Underscore(_) or A to Z or a to z.
- C) Default return type of any function is an Integer.
- D) All the above.

Answer D

60) Choose a correct statement about C Function.?

```
main()
{
    printf("Hello");
}
```

- A) "main" is the name of default must and should Function.
- B) main() is same as int main()
- C) By default, return 0 is added as the last statement of a function without specific return type.
- D) All the above

Answer D

61) A function which calls itself is called a ___ function.

- A) Self Function
- B) Auto Function
- C) Recursive Function
- D) Static Function

Answer C

62) What is the output of C Program with Functions.?

```
int main()
{
    void show()
    {
        printf("HIDE");
    }
    show();
    return 0;
}
```

- A) No output
- B) HIDE
- C) Compiler error
- D) None of the above

Answer B

Explanation:

Notice that show() function is defined inside main() function. It will not produce a compile error. But, it is not recommended to define a FUNCTION INSIDE A FUNCTION. DO NOT DO.

63) What is the output of C Program with functions.?

```
void show();
int main()
{
    show();
    printf("ARGENTINA ");
    return 0;
}
void show()
{
    printf("AFRICA ");
}
```

- A) ARGENTINA AFRICA
- B) AFRICA ARGENTINA
- C) ARGENTINA
- D) Compiler error

Answer B

Explanation:

First show() function is called. So it prints AFRICA first.

64) What is the output of C Program with functions.?

```
int main()
{
    show();
    printf("BANK ");
    return 0;
}
void show()
{
    printf("CURRENCY ");
}
```

- A) CURRENCY BANK
- B) BANK CURRENCY
- C) BANK
- D) Compiler error

Answer D

Explanation:

Yes. Compiler error. Before calling the show(); function, its Function Prototype should be declared before outside of main() and before main().

```
void show();
int main()
{
    show();
    printf("BANK ");
    return 0;
}
```

65) How many values can a C Function return at a time.?

- A) Only One Value
- B) Maximum of two values
- C) Maximum of three values
- D) Maximum of 8 values

Answer

Explanation:

Using a return val; statement, you can return only one value.

66) What is the output of a C program with functions.?

```
void show();
void main()
{
    show();
    printf("RAINBOW ");
    return;
}
void show()
{
    printf("COLOURS ");
}
```

- A) RAINBOW COLOURS
- B) COLOURS RAINBOW
- C) COLOURS
- D) Compiler error

Answer B

Explanation:

The code executes normally. VOID functions should not return anything. RETURN; is returning nothing.

1. void main() ... return; Returns nothing. The code is valid.
2. void show() function has No return; statement. It is also valid.

67) What is the output of C Program.?

```
void show();
void main()
{
    printf("PISTA ");
    show();
}
void show()
{
    printf("CACHEW ");
    return 10;
}
```

- A) PISTA CACHEW
- B) CASHEW PISTA
- C) PISTA CASHEW with compiler warning
- D) Compiler error

Answer C

Explanation:

void show() function should not return anything. So return 10; is not recommended.

68) What is function prototype?

- A) Function name, Parameter list
- B) Return type, Function definition, Parameter list
- C) Return type, Function name, Parameter list
- D) None of the above

Answer: C

Explanation: The Return type of the function, the name of the function and all the parameters of the function inclusively called the prototype of the function. **Ex: int add(int, int);**

69) What is the output of C Program with functions.?

```
void main()
{
    int a;
    printf("BOOKS COUNT=");
    a=show();
    printf("%d", a);
}
```

```
int show()
{ return 10;
  return 25;
}
```

- A) BOOKS COUNT=10
- B) BOOKS COUNT=25
- C) BOOKS COUNT=0
- D) Compiler error

Answer A

Explanation:

More than one return statement will not cause Compiler Error. But only FIRST return STATEMENT is executed. Anything after return 10; is not reachable.

70) What are types of Functions in C Language.?

- A) Standard Library Functions
- B) User Defined Functions
- C) Both Standard Library and User Defined
- D) None of the above

Answer C

71) What is the output of C Program with functions and pointers.?

```
int myshow(int *);
void main()
{
    int a=10;
    myshow(&a);
}
int myshow(int *k)
{
    printf("Received %d, ", *k);
}
```

- A) Received RANDOMNumber,
- B) Received 10,
- C) Received 10,
- D) Compiler error

Answer C

Explanation:

It is called Passing a variable by reference. You are passing &a instead of a. Address of a or &a is received as int *k. Observe the function prototype declaration before main(), int myshow(int *).

72) What is the output of C Program with functions and pointers.?

```
void myshow(int *);
void main()
{ int a=10;
  printf("%d ", a);
  myshow(&a);
  printf("%d", a);
}
void myshow(int *k)
{ *k=20;
}
```

- A) 10 10
- B) 20 20
- C) 10 20
- D) Compiler error

Answer C

Explanation:

You passed &a instead of a into myshow(int) function. *k=20 changes the value of passed variable passed by reference.

73) Choose correct statements about C Language Pass By Value.

- A) Pass By Value copies the variable value in one more memory location.
- B) Pass By Value does not use Pointers.
- C) Pass By Value protects your source or original variables from changes in outside functions or called functions.
- D) All the above

Answer D

74) What is the limit for number of functions in a C Program.?

- A) 16
- B) 31
- C) 32
- D) None of the above

Answer D

Explanation:

Yes. There is no limit on the number of functions in a C Program.

75) Every C Program should contain which function.?

- A) printf()
- B) show()
- C) scanf()
- D) main()

Answer D

Explanation:

main() is a compulsory function with or without returning anything.

```
void main() { }
```

```
int main() { return 0; }
```

76) What is the minimum number of functions to be present in a C Program.?

- A) 1
- B) 2
- C) 3
- D) 4

Answer A

Explanation:

At least there will be one function which is main() function.

77) What is the maximum number of statements that can present in a C function.?

- A) 64
- B) 128
- C) 256
- D) None of the above

Answer D

Explanation:

There is no limit on the number of statements that can present in a C Function.

78) What characters are allowed in a C function name identifier.?

- A) Alphabets, Numbers, %, \$, _
- B) Alphabets, Numbers, Underscore (_)
- C) Alphabets, Numbers, dollar \$
- D) Alphabets, Numbers, %

Answer B

Explanation:

Remember that a C function name can not start with a number but it can contain numbers after 1st character is either an Underscore (_) or an Alphabet.

79) What is the output of C Program with functions and pointers.?

```
int main()
{
    int b=25;
    //b memory location=1234;
    int *p = b;
    printf("%d %d", b, p);

    return 0;
}
```

- A) 25 1234
- B) 25 0
- C) 25 25
- D) Compiler error

Answer C

Explanation:

Integer Pointer *p copied the value of b to a new memory location. Its is same as int p= b;. Only p=&b points to the same memory of b.

80) What is the output of C Program with functions and pointers.?

```
int main()
{
    int b=25;
    //b memory location=1234;
    int *p;
    p=&b;
    printf("%d %d %d", &b, p);
    return 0;
}
```

- A) 25 25
- B) 1234 1234
- C) 25 1234
- D) 1234 25

Answer B

Explanation:

Integer pointer is declared by int *p. p=&b makes pointer P to point the address of b. So &b and p hold only address.

81) What do you call STAR * and Ampersand & in a c program context.?

```
int a=10, *p;
p = &a;
printf("%d %d", a, *p);
```

- A) * = DEREFERENCE operator, & = REFERENCE operator
- B) * = ADDRESS OF operator, & = ADDRESS OF operator
- C) * = REFERENCE operator, & = REFERENCE operator
- D) * = VALUE AT operator, & = VALUE AT operator

Answer A

Explanation:

&b gives address REFERENCE of b. *p gives value DEREFERENCE of memory location of b. The * is also called an INDIRECTION operator.

82) What is the output of C Program with functions.?

```
#include
int sum(int,int);
int main()
{
    int a=5, b=10, mysum;
    mysum = sum(a,b);
    printf("SUM=%d ", mysum);
```

```

    printf("SUM=%d", sum(10,20));
    return 0;
}
int sum(int i, int j)
{
    return (i+j);
}

```

- A) SUM=15 SUM=30
- B) SUM=30 SUM=15
- C) SUM=15 SUM=15
- D) SUM=30 SUM=30

Answer A

Explanation:

You can call a function sum(10,20) inside another function printf directly.

83) Arguments passed to a function in C language are called ___ arguments.

- A) Formal arguments
- B) Actual Arguments
- C) Definite Arguments
- D) Ideal Arguments

Answer B

84) Arguments received by a function in C language are called ___ arguments.

- A) Definite arguments
- B) Formal arguments
- C) Actual arguments
- D) Ideal arguments

Answer B

85) Choose a corrects statement about C language function arguments.

- A) Number of arguments should be same when sending and receiving
- B) Data Type of each argument must match
- C) Order of each argument should be same
- D) All the above

Answer D

Explanation:

20.0 is float. But char j is Character type. So, it is a mismatch. Here exactly two arguments are passed and two arguments are received.

int main()

```

{
    sum(10, 20.0);
    return 0;
}
int sum(int i, char j)
{
    return 10;
}

```

86) Choose a correct statement with C Functions.

- A) A function can call any other function any number of times
- B) You can write any function in any order in a multi function C File.
- C) You can refer to or call any function using a Pointer also.
- D) All the above

Answer D**87) What is the default return value of a C function if not specified explicitly.?**

- A) -1
- B) 0
- C) 1
- D) None of the above

Answer C**Explanation:**

```

int funny()
{
//return 0; is added by compiler.
}

```

88) What is the output of C Program with functions.?

```

int bunny(int,int);
int main()
{
    int a, b;
    a = bunny(5, 10);
    b = bunny(10, 5);
    printf("%d %d", a, b);
    return 0;
}
int bunny(int i, int j)
{
    return (i, j);
}

```

- A) 5 10
- B) 10 5
- C) 5 5
- D) Compiler error

Answer B **Explanation:**

Do not try to put the same return (a,b). It is a bad practice to return 2 values at a time. You can return only one value. Value right side value return j works every time.

89) What are the data type of variables that can be returned by a C Function.?

- A) int, float, double, char
- B) struct, enum
- C) Pointers to variables, arrays, functions, struct variables, enum variables etc
- D) All the above

Answer D

90) What is the output of a C Program with functions and pointers.?

```
void texas(int *,int *);
int main()
{ int a=11, b=22;
  printf("Before=%d %d, ", a, b);
  texas(&a, &b);
  printf("After=%d %d", a, b);

  return 0;
}
void texas(int *i, int *j)
{ *i = 55;
  *j = 65;
}
```

- A) Before=11 22, After=11 22
- B) Before=11 22, After=55 65
- C) Before=11 22, After=0 0
- D) Compiler error

Answer B

Explanation:

a and b are passed through Call By Reference &a, &b. So the passed addresses are collected by variables i and j. So changes made using pointers are retained even after the function execution is over.

91) What is the output of a C Program.?

```
void show(int,int,int);
int main()
{
    int a = 1;
    show(++a, a++, a);
    return 0;
}
void show(int i, int j, int k)
{
    printf("%d %d %d,\n", i, j, k);
}
```

- A) 1 1 3,
- B) 3 1 3,
- C) 3 1 1,
- D) 3 3 3,

Answer B

Explanation:

1) ++a, 2) a++ 3) a. Second and third arguments have higher priority than third parameter A. So Second is processed. Than first is processed. Finally the actual value of a at that point is given to third place holder.

92) What is the output of C Program with pointers.?

```
int main()
{
    int a = 4;
    int *p;
    p=&a;
    while(*p > 0)
    {
        printf("%d ", *p);
        (*p)--;
    }
    return 0;
}
```

- A) 0 0 0 0
- B) 4 4 4 4
- C) 4 3 2 1
- D) Compiler error

Answer C

Explanation:

Notice the decrement operation on variable "a" using (*p)--. Without parantheses, variable is not decremented but memory location pointed is decremented and pointed to a garbage value.

93) What is the output of C Program with pointers.?

```
int main()
{
    int a = 10;
    int *p, **q;
    p = &a;
    q = &p;
    printf("%d ", a);
    *p = 15;
    printf("%d ", a);
    **q = 20;
    printf("%d ", a);
    return 0;
}
```

- A) 10 10 10
- B) 10 0 0
- C) 10 15 20
- D) Compiler error

Answer C**Explanation:**

Here p is pointer to an integer. q is a pointer to the pointer p. That is why you should use two STARS **.

94) What is the output of C Program with pointers.?

```
int main()
{
    int a=20;
    int *p, *q;
    p=&a;
    q=p;
    printf("%d ", a);
    *p=30;
    printf("%d ", a);
    *q=40;
    printf("%d ", a);
    return 0;
}
```

- A) 20 0 0
- B) 20 20 20
- C) 20 30 40
- D) Compiler error

Answer C

Explanation:

P is already a pointer to an integer a. Q copied P. So Q is also a pointer to the same integer a.

95) What is the output of C Program with pointers.?

```
int main()
{
    int a=20;
    //a memory location=1234
    printf("%d %d %d", a, &a, *(&a));
    return 0;
}
```

- A) 20 20 20
- B) 20 1234 1234
- C) 20 1234 20
- D) 20 20 20

Answer C

Explanation:

If VALUEAT operator * and ADDRESSOF operator & are used immediately, it is same as the variable itself. So *(&a) == a.

96) What is the output of C Program with recursive function.?

```
int sum(int);
int main()
{
    int b;
    b = sum(4);
    printf("%d", b);
}

int sum(int x)
{ int k=1;
  if(x<=1)
    return 1;
  k = x + sum(x-1);
  return k;
}
```

- A) 10
- B) 11
- C) 12
- D) 15

Answer A

Explanation:

$4 + 3 + 2 + 1 = 10$.

97) A recursive function can be replaced with ___ in c language.

- A) for loop
- B) while loop
- C) do while loop
- D) All the above

Answer D

98) A recursive function is faster than ___ loop.

- A) for
- B) while
- C) do while
- D) None of the above

Answer D

Explanation:

Yes. Recursion is slow. Variable are kept and remove on STACK memory multiple times.

99) A recursive function without a conditional statement will always lead to.?

- A) Finite loop
- B) Infinite loop
- C) Incorrect result
- D) Correct result

Answer B

Explanation:

Yes. To come out of recursion, you must use IF or ELSE blocks.

100) Choose a correct statement about Recursive Function in C language.

- A) Each recursion creates new variables at different memory locations
- B) There is no limit on the number of Recursive calls
- C) Pointers can also be used with Recursion but with difficulty.
- D) All the above

Answer D

For CIT Students