Q1. Predict the output for the following code?

int main() {

char p[20];

char \*s1 = "character string";

int length = strlen(s1);

int i;

for (i = 0; i < length; i++)

{

p[i] = s1[length-i];

}

printf("%s", p);

printf("%d", length);

return 0;

}

1. character string

15

1. gnirts retcarahc

16

1. character string

16

1. 16

Q2. #include <stdio.h>

void f(int a[2][])

{

a[0][1] = 3;

int i = 0, j = 0;

for (i = 0;i < 2; i++)

for (j = 0;j < 3; j++)

printf("%d", a[i][j]);

}

void main()

{

int a[2][3] = {0};

f(a);

}

a.complie time error

b all 0’s

c. all garbage values

d.all 1’s

Q3. Consider the following C declaration

|  |
| --- |
| union point{           float y1;           long z1;       };  struct  {      short s[5];      union {           float y;           long z;      }u;  union point u1;  } t; |

Assume that objects of the type short, float and long occupy 2 bytes, 4 bytes and 8 bytes, respectively. The memory requirement for variable t, ignoring alignment considerations, is

(A) 26 bytes  
(B) 30 bytes  
(C) 34 bytes  
(D) 24 bytes

Q4.

#include <stdio.h>

char \*c[] = {"Formative1", "Formative2", "Formative3", "Formative4"};

char \*\*cp[] = {c+3, c+2, c+1, c};

char \*\*\*cpp = cp;

int main()

{

printf("%s ", \*\*++cpp);

printf("%s ", \*--\*++cpp+3);

printf("%s ", \*cpp[-2]+3);

printf("%s ", cpp[-1][-1]+1);

return 0;

}

a. Formative3 mative1 mative4 ormative2

b. Formative4 mative1 mative3 ormative2

c. Formative2 mative1 mative4 formative3

d Formative3 mative4 mative1 ormative2

Q5. Predict the output?

|  |
| --- |
| #include <stdio.h>  int fun(char \*str1)  {  char \*str2 = str1;  while(\*++str1)  {printf("1 ");}  return (str1-str2);  }    int main()  {  char \*str = "formative\_assessment";  printf("%d", fun(str));  return 0;  } |

a.1 20

b. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 19

c. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 20

d. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 20

Q6. Predict the output of following C program

|  |
| --- |
| #include<stdio.h>  struct Point  {    int x, y, z;  };    int main()  {    struct Point p1 = {.y = 0, .z = 1, .x = 2};    printf("%d %d %d", p1.x, p1.y, p1.z);    return 0;  } |

a.2 0 1

b.0 1 2

c.compile time error

d.2 1 0

Q7. Which of the following statements correctly assigns 12 to month using pointer variable pdt?

|  |
| --- |
| #include<stdio.h>  struct date  {  int day;  int month;  int year;  };  struct emp  { int temp\_id;  struct date date\_of\_joining;  };    int main()  {  struct emp d;  struct emp \*pdt;  pdt = &d;  return 0;  } |
|  |

## a. pdt->date\_of\_joining.month=12

|  |
| --- |
| b. &pdt.month = 12  c. Pdt.date\_of\_joining.month=12  d. Pdt.date\_of\_joining->month=12 |

## Q9. Which of the following function is used to find the first occurrence of a given string in another string?

a.firststr()

b.strstr()

c.strnstr()

d.strrchr()

Q10.What will be the output for the following given code?

#include<stdio.h>

#include<string.h>

int main()

{

char str1[20] = "programming", str2[20] = "language";

printf("%sn", strcpy(str2, strncat(str1, str2,5)));

return 0;

}

1. programminglangun
2. programminglanguagen
3. programminglanguge
4. languageprogr

Q10.What is the output?

#include<stdio.h>

int main()

{

static int arr[] = {0, 1, 2, 3, 4};

int \*p[] = {arr, arr+1, arr+2, arr+3, arr+4};

int \*\*ptr=p;

ptr++;

printf("%d, %d, %d\n", ptr-p, \*ptr-arr, \*\*ptr);

ptr++;

printf("%d, %d, %d\n", ptr-p, \*ptr-arr, \*\*ptr);

return 0;

}

1. 0, 0, 0  
   1, 1, 1
2. 1, 1, 2  
   2, 2, 3
3. 1, 1, 1  
   2, 2, 2
4. 1, 2, 3  
   2, 3, 4

Q11.What is the size of ptr2 and ptr1?

int main()

{

struct x

{

int j;

char k[ 100];

unsigned I;

};

int \*ptr1;

struct x \*ptr2;

printf("%d ",sizeof(ptr2));

printf("%d",sizeof(ptr1));

return 0;

}

a.8 4

b.4 4

c4 8

d.8 8

Q12.What will be the output for the following given code?

#include<stdio.h>

#include<stdlib.h>

int main()

{

char \*s1 = (char \*)malloc(50);

char \*s2 = (char \*)malloc(50);

strcpy(s1,"QUIZ2");

strcpy(s2, "quiz1");

strstr(s1, s2);

printf("%s", s1);

return 0;

}

a.quiz1QUIZ2

b. QUIZ2quiz1

c.compile time error

d.QUIZ2

Q13. Predict the output of the following program:

#include <stdio.h>

int main()

{

char str[] = "%d %c", arr[] = "Assignment";

printf(str, 0[arr], 2[arr + 3]);

return 0;

}

a.71 Q

b.65 n

c.65 A

d.A Q

Q14. For the following declaration of a function in C, pick the best statement

|  |
| --- |
| int [] fun(void (\*fptr)(int \*)); |

(A)  No compile error. fun is a function which takes a function pointer fptr as argument and returns an array of int. Also, fptr is a function pointer which takes int pointer as argument and returns void.  
(B) No compile error. fun is a function which takes a function pointer fptr as argument and return an array of int.  
(C) It will result in compile error.

(D) No compile error. fun is a function which takes a function pointer fptr as argument and returns an array of int. The array of int depends on the body of fun i.e. what size array is returned. Also, fptr is a function pointer which takes int pointer as argument and returns void.

Q15. Predict the output of below program:

|  |
| --- |
| #include <stdio.h>    int main()  {      int arr[5];      // Assume base address of arr is 2000 and size of integer is 32 bit      printf("%u %u", arr + 1, &arr + 1);        return 0;  } |

1. 2004 2020
2. 2004 2004
3. 2004 Garbage value
4. The program fails to compile because Address-of operator cannot be used with array name

|  |  |
| --- | --- |
|  |  |

Q16. What is x in the following program?

|  |  |
| --- | --- |
| #include<stdio.h>  int main()  {  typedef char (\*(\*arrfptr[3])())[10];  arrfptr x;  return 0;  } | |
|  | |
| [A.](javascript:%20void%200;) | x is a pointer |
| [B.](javascript:%20void%200;) | x is an array of three pointer |
| [C.](javascript:%20void%200;) | x is an array of three function pointers |
| [D.](javascript:%20void%200;) | Error in x declaration |

Q17.What will be the output?

# include <stdio.h>

int main ()

{

char a [6] = "security";

int i, j;

for (i = 0, j = 5; i < j; a [i++] = a [j--]);

printf ("%s\n", a);

}

a. iruurr

b. iruuri

c. iruuii

d. irurri

Q18.What will be the output, if the entered value is 18?

#include <stdio.h>

#include <ctype.h>

int main()

{ char c;

printf("Enter a character: ");

scanf("%c",&c);

if (isdigit(c) == 0)

printf("%c is not a digit.",c);

else

printf("%c is a digit.",c);

return 0;

}

1. 1 is a digit.
2. 18 is a digit.
3. 8 is a digit.
4. Compile time error as the number 18 is not a single digit number.

Q19.Predict the output for the following

include<stdio.h>

struct values

{

int i;

float f;

};

void change( values \*v, int a, float b)

{

v->i=a;

v->f=b;

}

int main()

{

values val={2,3.4};

printf("\n %d %f", val.i, val.f);

change(&val,5,7.9);

printf("\n %d %f", val.i, val.f);

return 0;

}

a. 2 3.400000

5 7.900000

b.Compile Time Error

c.No Output

d.2 3.4

5 7.9

Q20.  Predict the output

#include<stdio.h>

int main()

{

int ar[]={0,1,2,0,1,2,2,0,1,2,0,1,1};

int i, ar1[10];

for(i=1;i<10;i++)

{ar1[i]=ar[9-1];}

for(i=1;i<10;i++);

{printf("%d",ar1[i]);}

return 0;

}

a. 111111111

b.0

c.copile time error

d. 2012010102102