

Technical SAP Software Solutions Sample Question Paper

1. If int is 2 bytes wide. What will be the output of the program?

```
#include
void fun(char**);
int main()
{
char *argv[] = {"ab", "cd", "ef", "gh"};
fun(argv);
return 0;
}
void fun(char **p)
{
char *t;
t = (p+= sizeof(int))[-1];
printf("%sn", t);
}
```

- A.ab
- B.cd
- C.ef
- D.gh

Answer: B

2. What will be the output of the program if the array begins at 65486 and each integer occupies 2 bytes?

```
int main()
{
int arr[] = {12, 14, 15, 23, 45};
printf("%u, %un", arr+1, &arr+1);
return 0;
```

Technical SAP Software Solutions Sample Question Paper

```
}
```

- A.12, 65490
- B.14, 65492
- C.65488, 65496
- D.64490, 65498

Answer: C

Solution:

Here, the base address(also the address of first element) of the array is 65486. => Here, arr is reference to arr has type "pointer to int". Therefore, arr+1 is pointing to second element of the array arr memory location. Hence $65486 + 2 \text{ bytes} = 65488$ => Then, &arr is "pointer to array of 5 ints". Therefore, &arr+1 denotes " $5 \text{ ints} * 2 \text{ bytes} * 1 = 10 \text{ bytes}$ ". Hence, beginning address $65486 + 10 = 65496$. So, &arr+1 = 65496. Hence the output of the program is 65488, 65496.

3. Recursive functions are executed in a

- A.last in first out order
- B.first in First out order
- C.Are maintained in a stack
- D.none of the above

Answer: A

4. What will be the output of the program?

```
#include  
int main()  
{
```

Technical SAP Software Solutions Sample Question Paper

```
int i=3, j=4, k, l;  
k = addmult(i, j);  
l = addmult(i, j);  
printf("%d %dn", k, l);  
return 0;  
}  
int addmult(int ii, int jj);  
{  
int kk, ll;  
kk = ii + jj;  
ll = ii * jj;  
return (kk, ll);  
}
```

- A.Function addmult()return 7 and 12
- B.No output
- C.Error: Compile error
- D.None of above

Answer: C

Solution:

There is an error in this statement `int addmult(int ii, int jj);`. We have to remove the semi-colon, because it was an definition of the function `addmult()`

5. Point out the error if any in the while loop.

```
main()  
{  
int i =0;
```

Technical SAP Software Solutions Sample Question Paper

```
while()  
{  
printf("%d",i++);  
if(i>10)  
break;  
}  
}
```

- A.the condition in the while loop is a must
- B.the while lop must be replaced by a for loop
- C. All of the Above
- D. None

Answer: A

6. What will be the output of the program?

```
#include  
void fun(int);  
int main()  
{  
int a=3;  
fun(a);  
return 0;  
}  
void fun(int n)  
{  
if(n > 0)  
{  
fun(-n);  
printf("%d,", n);  
fun(-n);
```

Technical SAP Software Solutions Sample Question Paper

```
}  
}
```

- A.0, 2, 1, 0
- B.1, 1, 2, 0
- C.0, 1, 0, 2
- D.0, 1, 2, 0

Answer: D

7. What will be output of following c program?

```
int main()  
{  
for(printf("1");!printf("0");printf("2")) printf("Sachin");  
return 0;  
}
```

- A.10sachin2
- B.10sachin
- C.10sachin210sachin2
- D.10

Answer: D

8. What will be the output of the program?

```
#include  
int main()  
{  
int fun();  
int i;
```

Technical SAP Software Solutions Sample Question Paper

```
i = fun();
printf("%dn", i);
return 0;
}
int fun()
{
_AX = 1990;
}
```

- A.Garbage value
- B.0 (Zero)
- C.1990
- D.No output

Answer: C

Solution:

The return value of the function is taken from the Accumulator `_AX=1990`.

9. What will be output of following c program?

```
void main()
{
int a[]={5,10,15};
int i=0,num;
num=a[++i]+ ++i+(++i);
printf("%d",num);
}
```

- A.6
- B.17
- C.16

Technical SAP Software Solutions Sample Question Paper

D.12

Answer:A

10. What will be the output of the program?

```
#include
int main()
{
int i = 5;
while(i- >= 0)
printf("%d,", i);
i = 5;
printf("\n");
while(i- >= 0)
printf("%i,", i);
while(i- >= 0)
printf("%d,", i);
return 0;
}
```

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

4, 3, 2, 1, 0, -1

B. 5, 4, 3, 2, 1, 0

5, 4, 3, 2, 1, 0

C. Error

D. 5, 4, 3, 2, 1, 0

5, 4, 3, 2, 1, 0

5, 4, 3, 2, 1, 0

Technical SAP Software Solutions Sample Question Paper

- A.A
- B.B
- C.C
- D.D

Answer: A

11. Point out the error in the following program.

```
#include
int main()
{
char str[] = "Freshersworld";
printf("%.#s %2s", str, str);
return 0;
}
```

- A.in Array declaration
- B.printf statement
- C.unspecified character in printf
- D.No error

Answer: D

12. Find the output of following snippet?

```
# include
void main()
{
char letter = 'Z';
printf("%c",letter);
}
```

Technical SAP Software Solutions Sample Question Paper

- A.Z
- B.90
- C.Garbage Value
- D.error

Answer: A

13. What will be the output of the program?

```
#include
#define SQR(x)(x*x)
int main()
{
int a, b=3;
a = SQR(b+2);
printf("%dn", a);
return 0;
}
```

- A.25
- B.11
- C.Error
- D.Garbage value

Answer: B

Solution:

$a = \text{SQR}(b+2)$; becomes, $\Rightarrow a = b+2 * b+2$; Here $\text{SQR}(x)$ is replaced by macro to $x*x$. $\Rightarrow a = 3+2 * 3+2$; $\Rightarrow a = 3 + 6 + 2$; $\Rightarrow a = 11$;

14. What will be the output of the program if value 25 given to `scanf()`?

Technical SAP Software Solutions Sample Question Paper

```
#include  
int main()  
{  
int i;  
printf("%dn", scanf("%d", &i));  
return 0;  
}
```

- A.1
- B.2
- C.5
- D.25

Answer: A

Solution:

The scanf function returns the number of input is given. printf("%dn", scanf("%d", &i)); The scanf function returns the value 1(one). Therefore, the output of the program is '1'.

```
15. void main()  
{  
char far *farther, *farthest;  
printf("%d..%d",sizeof(farther),sizeof(farthest));  
}
```

What is the ouput of above snippet?

- A.2.4
- B.syntax error
- C.compiler error

Technical SAP Software Solutions Sample Question Paper

D.4.2

Answer: D

16. What will be the content of 'file.c' after executing the following program?

```
#include
int main()
{
FILE *fp1, *fp2;
fp1=fopen("file.c", "w");
fp2=fopen("file.c", "w");
fputc('A', fp1);
fputc('B', fp2);
fclose(fp1);
fclose(fp2);
return 0;
}
```

A.B

B.A B

C.B B

D.Error in opening file 'file1.c'

Answer: A

17. What is the output of following snippet?

```
main()
{
int c[] = { 2.8,3.4,4,6.7,5};
int j,*p=c,*q=c;
for(j=0;j<5;j++)
```

Technical SAP Software Solutions Sample Question Paper

```
{  
printf("%d",*c);  
++q;  
}  
for (j =0; j<5;j++)  
{  
printf("%d",*p);  
++p;  
}  
}
```

- A.syntax error
- B.compiler error
- C.2 2 2 2 2 2 3 4 6 5
- D.5 6 4 5 2 2 2 2

Answer: C

18. What will be the output of the program ?

```
#include  
int main()  
{  
float arr[] = {12.4, 2.3, 4.5, 6.7};  
printf("%dn", sizeof(arr)/sizeof(arr[0]));  
return 0;  
}
```

- A.4
- B.5
- C.6
- D.7

Technical SAP Software Solutions Sample Question Paper

Answer: A

Solution:

The variable arr has 4 elements. The size of the float variable is 4 bytes. Hence 4 elements x 4 bytes = 16 bytes sizeof(arr[0]) is 4 bytes Hence 16/4 is 4 bytes Hence the output of the program is '4'.

```
19. main()
{
char *p;
p = "Hello";
printf ("%cn" *&*p);
}
```

What is the output of above snippet ?

- A.H
- B.syntax error
- C.compiler error
- D.E

Answer: A

```
20. main()
{
int i;
print("%d",scanf("%d",&i));
// value 10 is given to the input here
}
```

What is the ouput of above snippet?

Technical SAP Software Solutions Sample Question Paper

- A.1
- B.compiler error
- C.syntax error
- D.2

Answer: A

21. What will be output of following c program?

```
void main()
{
int a,i=4;
a=- -i+- -i+- -5;
printf("%d %d",a,i);
}
```

- A.13 4
- B.-3 2
- C.7 2
- D.-13 4

Answer: A

22. Find the output from following program?

```
#include
int main()
{
int a = 10, b;
a >=5 ? b=100: b=200;
printf("%dn", b);
return 0;
}
```

Technical SAP Software Solutions Sample Question Paper

- A.100
- B.200
- C.Error: L value required for b
- D.Garbage value

Answer: C

Solution:
variable b is not assigned

23. What will be output of following c program?

```
void main()  
{  
int z;  
z=(5,3,2);  
printf("%d",z);  
}
```

- A.5
- B.3
- C.2
- D.10

Answer: C

24. What will be the output of the program?

```
#include  
int main()  
{  
unsigned int i = 65535;
```

Technical SAP Software Solutions Sample Question Paper

```
/* Assume 2 byte integer*/  
while(i++ != 0)  
printf("%d",++i);  
printf("\n");  
return 0;  
}
```

- A.Infinite loop
- B.0 1 2 ... 65535
- C.0 1 2 ... 32767 – 32766 -32765 -1 0
- D.No output

Answer: A

25. What will be output of following c program?

```
int main()  
{  
float **(*ptr)[4]=(float **(*)[4]);  
ptr+=5;  
printf("%d %d",ptr,sizeof ptr); return 0;  
}
```

- A.0 2
- B.5 2
- C.4 2
- D.40 2

Answer: D

26. What will be output of following c program?

```
struct myStruct
```

Technical SAP Software Solutions Sample Question Paper

```
{  
int a;  
char b;  
}  
*ptr;  
int main()  
{  
struct myStruct ms={400,'A'};  
printf("%d %d",ptr->a,ptr->b);  
return 0;  
}
```

- A.400 A
- B.400 65
- C.400 97
- D.0 0

Answer: D

27. What will be the output of the program?

```
#include  
int main()  
{  
int i;  
i = printf("How r un");  
i = printf("%d", i);  
printf("%d", i);  
return 0;  
}
```

- A.How r u 7 2

Technical SAP Software Solutions Sample Question Paper

- B.How r u 8 2
- C.How r u 1 1
- D.Error: cannot assign printf to variable

Answer: B

28. What will be output of following c program?

```
#include "string.h"
typedef struct stu1
{
int roll;
char *name;
double marks;
}
STU1;
typedef struct stu2
{
int roll;
char *name;
double marks;
}
STU2;
void main()
{
STU1 s1={25,"Rohit",87.43},*p1;
STU2 *p2; p1=&s1;
memcpy(p2,p1,4);
printf("Roll : %dn",p2->roll);
printf("Name : %sn",p2->name);
printf("Marks : %lf",p2->marks);
}
```

Technical SAP Software Solutions Sample Question Paper

A.Roll : 25 Name : Rohit Marks : 87.430000
B.Roll : 25 Name : Rohit Marks : 0.000000
C.Roll : 0 Name : Rohit Marks : 87.430000
D.Roll : 0 Name : null Marks : 0.000000

Answer: B

29. Assume integer is 2 bytes wide. How many bytes will be allocated for the following code?

```
#include  
#include  
#define MAXROW 3  
#define MAXCOL 4  
int main()  
{  
int (*p)[MAXCOL];  
p = (int (*) [MAXCOL])malloc(MAXROW *sizeof(*p));  
return 0;  
}
```

A.56 bytes
B.128 bytes
C.24 bytes
D.12 bytes

Answer: C

30. What will be output when you will execute following c code?

```
void main()  
{
```

Technical SAP Software Solutions Sample Question Paper

```
volatile int a=11;  
printf("%d",a);  
}
```

- A.Garbage
- B.11
- C.2
- D.We cannot predict

Answer: D