**TECHNOVA MARKS=35**

**TECH-TRIVIA**

**TEAM NO:**

**1. What is the correct way to declare a pointer to an integer?**  
 A)int p\*;

**B)int \*p;**

C)int &p;

D)int p[];

**2. Guess the output of following code snippet**

#include<stdio.h>

int main(){

int i = 1;

while(++i <= 5){

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

}

}

1. **24**
2. 23
3. 20
4. 26

**3. What is the value of sizeof(char) in C?**

A)2 bytes

**B)1 byte**

C)4 bytes

D)8 bytes

**4. What is the default value of a local variable in C?**

A)0

**B)Garbage value**

C)NULL

D)1

**5. What will happen if you access an array out of its bounds in C?**

A)Program crashes

**B)Undefined behavior**

C)Compiler error

D)Always prints 0

**6. What is the value of the expression 5 & 3 in C?**

**A)1**

B)2

C)3

D)5

**7. Which of the following declarations is illegal in C?**

A)const int x = 10;

B)static int y;

C)volatile int z;

**D)register int \*ptr;**

**8. What is the correct way to compare two strings in C?**

A) if (str1 == str2)   
**B) if (strcmp(str1, str2) == 0)**  
C) if (str1.compare(str2))  
D) if (str1.equals(str2))

**9. What is the output of this code snippet?**

int a = 5;  
int b = sizeof(a++);  
printf("%d %d", a, b);

**A)5 4**

B)6 4

C)5 8

D)Undefined behavior

**10. What is the output of the following code?**

int x = 5, y = 6;  
printf("%d", (x = y) == 5);

A)1

**B)0**

C)5

D)6

**11. Which of the following statements about sizeof() operator in C is true?**

A)sizeof() can only be applied to variables, not types.

B)sizeof() is a preprocessor directive.

C)sizeof() always returns an int type.

**D)sizeof() returns the size in bytes**

**12. What will be the output of the following code?**

int x = 10;  
int \*p = &x;  
\*p = \*p + 2;  
printf("%d", x);

A)10

**B)12**

C)8

D)14

**13. What will be the output of the following code snippet?**

int x = 5, y = 10;  
printf("%d", x++ + ++y);

A)15

B)**16**

C)17

D)18

**14. Which of the following functions is used to free dynamically allocated memory in C?**

A)delete()

**B)free()**

C)malloc\_free()

D)deallocate()

**15. Which of the following function is used to compare two strings in C?**

**A)strcmp()**

B)strcomp()

C)strcompare()

D)stringcompare()

**16. Guess the output of following code snippet**

#include <stdio.h>

int main()

{

int N = 11011

int a = 1;

int ans = 0;

while (N != 0)

{

ans = ans + (N \* 10) % a;

N = N / 10;

a = a \* 2;

}

printf("%d", ans); return 0;

}

1. **16**
2. 27
3. 24
4. 8

**17. What will be the output of the following C program snippet?**

#include <stdio.h>

int recursiveFunc(int n) {

if (n <= 1)

return n;

return recursiveFunc(n - 1) + recursiveFunc(n - 2);

}

int main() {

int result = recursiveFunc(6);

printf("%d", result);

return 0;

}

1. 5
2. **8**
3. 13
4. 15

**18. What will be the output of the following C program snippet?**

#include <stdio.h>

void func(int \*p, int \*q) {

\*p = \*p ^ \*q;

\*q = \*p ^ \*q;

\*p = \*p ^ \*q;

}

int main() {

int a = 5, b = 10;

func(&a, &b);

printf("%d %d", b, a);

return 0;

}

1. **5 10**
2. -5 10
3. 5 -10
4. 0 0

**19. What is the output of the following program?**

#include <stdio.h>

int main() {

int x = 3;

int y = 4;

int z = (x++, y++);

printf("%d", z);

return 0;

}

A) 3

**B) 4**

C) 0

D) Error

**20. What will be the output of the following code?**

#include <stdio.h>

int main() {

int a = 1;

int b = 2;

printf("%d", (a > b) ? a : (b > a ? b : a));

return 0;

}

A) 1

**B) 2**

C) 0

D) Undefined

**21. What will be the output of the following code?**

#include <stdio.h>

int main(){

static int var = 5;

print("%d", var--);

if(var)

main();

}

1. **5 4 3 2 1**
2. 5 4 3 2 1 0
3. 0 1 2 3 4 5
4. Error

**22. What will be the output of the following code?**

#include <stdio.h>

int main() {

int arr[5] = {0, 1, 2, 3, 4};

int \*p = arr + 2;

printf("%d", \*(p - 1) + \*(p + 1));

return 0;

}

A) 3

**B) 5**

C) 4

D) 6

**23. what is output of following program, if there is error specify**

#include<stdio.h>

#include<stdlib.h>

int main()

{

int a = 55, b = 23;

printf("max = %d\n", (a + b) + abs(a - b) / 2);

printf("min = %d", (a + b) - abs(a - b) / 2);

return 0;

}

1. max = 55

min = 33

1. max = 33

min = 55

1. max = 0

min = 0

1. **Specify Error: Correct logic is:**

printf("max = %d\n", (a + b + abs(a - b)) / 2);

printf("min = %d", (a + b - abs(a - b)) / 2);

**24. what is output of following program, if there is error specify**

int power(int a, int b)

{

if (b == 0)

return 1;

return power(a, b \* 1) - a;

}

int main()

{

int a = 4, b = 5;

int ans = power(a, b);

printf("%d", ans);

return 0;

}

1. 1024
2. 512
3. 1256
4. **Specify Error: infinite recursion, base case will never meet**

**25. what is output of following program, if there is error specify**

#include <stdio.h>

void transpose(int M, int N, int A[M][N], int B[N][M])

{

int i, j;

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

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

B[i][j] = A[j][i];

}

int main()

{

int M = 3;

int N = 4;

int A[3][4] = { { 1, 1, 1, 1 },

{ 2, 2, 2, 2 },

{ 3, 3, 3, 3 } };

int B[N][M], i, j;

transpose(N, M, A, B);

printf("Result matrix is \n");

for (i = 0; i < N; i++) {

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

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

printf("\n");

}

return 0;

}

1. 1 2 3

1 2 3

1 2 3

1 2 3

1. 1 1 1 1

2 2 2 2

3 3 3 3

1. 0 0 0

0 0 0

0 0 0

0 0 0

1. **Specify Error: accessing elements out of bounds, interchanged variables**

**N and M**