MADRAS INSTITUTE OF TECHNOLOGY
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ASSOCIATION OF COMPUTER TECHNOLOGISTS

C NOOBIES

RULES:

- On the answer sheet team member should stick their team **QR** and write their unique participant id below it.
- Don’t leave the app during the test.
- Time limit – **45 minutes.**
- Keep your mobile in airplane mode.
- Each question carries 1 mark.

1. int main()

```
{
      extern int i;
       i = 20;
      printf("%d", sizeof(i));
      return 0;
}
```

(A) 20
(B) 0
(C) Undefined reference to i
(D) Linking Error

2. The declaration int (*p)[5];

This means

(A) p is one dimensional array of size 5, of pointers to integers.

(B) p is a pointer to a 5 elements integer array.

(C) The same as int *p[]

(D) None of these.

3.
```
for (i < 10; i = 0 ; i++) // (i)
for (i < 10; i++ ; i = 0) // (ii)
for (i = 0; i < 10 ; i++) // (iii)
for (i = 0; i++ ; i < 10) // (iv)
for (i++; i = 0 ; i < 10) // (v)
for (i++; i < 0 ; i = 10) // (vi)
```

(A) All the above “for” loops would compile successfully.

(B) All the above “for” loops would compile successfully. Except (iii), the behaviour of all the other “for” loops depend on compiler implementation.

(C) Only (iii) would compile successfully.

(D) Only (iii) and (iv) would compile successfully.

(E) Only (iii) and (iv) would compile successfully but behaviour of (iv) would depend on compiler implementation.

4. Which of the following statement is correct for **switch** controlling expression?

(A) Only int can be used in “switch” control expression.

(B) Both int and char can be used in “switch” control expression.

(C) All types i.e. int, char and float can be used in “switch” control expression.

(D) “switch” control expression can be empty as well.

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

(A) 2002

(B) 2004

(C) 2020

(D) lvalue required

6.
```
int main()
 {
    int i;
    int arr[5] = {1};
    for (i = 0; i < 5; i++)
        printf("%d ", arr[i]);
    return 0;
 }
```

(A) 1 followed by four garbage values

(B) 1 0 0 0 0

(C) 1 1 1 1 1

(D) 0 0 0 0 0

7.
```
#include "stdio.h"
int main()
{
    int x, y = 5, z = 5;
    x = y == z;
    printf("%d", x);
    getchar();
    return 0;
}
```

(A) 0

(B) 1

(C) 5

(D) Compiler Error

8.
```
#include<stdio.h>

  int main()
  {
            char *s[] = { "knowledge","is","power"};
            char **p;
            p = s;
            printf("%s ", ++*p);
            printf("%s ", *p++);
            printf("%s ", ++*p);
            return 0;
  }
```

(A) is power
(B) nowledge nowledge s
(C) is ower
(D) nowledge knowledge is

9. The C language consists of _____ number of keywords.

(A) 32
(B) 40
(C) 24
(D) 56

10. Which file is generated after pre-processing of a C program?

(A) .p
(B) .i
(C) .o
(D) .m

11.
```
#include <stdio.h>
#define MAX 1000
int main()
{
        int MAX = 100;
        printf("%d ", MAX);
        return 0;
}
```

(A) 1000
(B) 100
(C) Compiler Error
(D) Garbage Value

12. Which of the following can have different meaning in different contexts?

(A) &
(B) *
(C) Both of the above
(D) There are no such operators in C

13.
```
#include "stdio.h"
void foo(void)
{
        static int staticVar;
```

```
         staticVar++;
        printf("foo: %d\n",staticVar);
}

void bar(void)
{
        static int staticVar;
        staticVar++;
         printf("bar: %d\n",staticVar);
}

int main()
{
        foo(), bar(), foo();
        return 0;
}
```

(A) Compile error because same static variable name is used in both foo and bar. Since these static variables retain their values even after function is over, same name can't be used in both the functions.

(B) Compile error because semicolon isn't used while calling foo() and bar() in side main function.

(C) No compile error and only one copy of staticVar would be used across both the functions and that's why final value of that single staticVar would be 3.

(D) No compile error and separate copies of staticVar would be used in both the functions. That's why staticVar in foo() would be 2 while staticVar in bar() would be 1.

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

(A) printf("%d%d", book.price, book.page);
(B) printf("%d%d", price.book, page.book);
(C) printf("%d%d", price::book, page::book);
(D) printf("%d%d", price->book, page->book);

15. What is the work of break keyword?

(A) Halt execution of program
(B) Restart execution of program
(C) Exit from loop or switch statement
(D) None of the above

16. Recursive functions are executed in a?

(A) First In First Out Order
(B) Load Balancing
(C) Parallel Fashion

(D) Last In First Out Order

17. The "C" language is

(A) Context free language
(B) Context sensitive language
(C) Regular language
(D) None of the above

18.

```
 #include <stdio.h>
int main()
{
        int i = 1024;
        for (; i; i >>= 1)
        printf("GeeksQuiz");
        return 0;
}
```

How many times will GeeksQuiz be printed in the above program?

(A) 10
(B) 11
(C) Infinite
(D) The program will show compile-time error

19.

```
#include <stdio.h>
int main()
{
         int i = 0;
        switch (i)
         {
                case '0': printf("Geeks");
                          break;
                case '1': printf("Quiz");
                          break;
                default: printf("GeeksQuiz");
        }
        return 0;
}
```

(A) Geeks
(B) Quiz
(C) GeeksQuiz
(D) Compile-time error

20.

```
#include <stdio.h>
#define EVEN 0
#define ODD 1
int main()
{
            int i = 3;
            switch (i & 1)
            {
            case EVEN: printf("Even");
                                    break;
            case ODD: printf("Odd");
                             break;
            default: printf("Default");
            }
             return 0;
}
```

(A) Even
(B) Odd
(C) Default
(D) Compile-time error