

## TEXAS Instruments Sample Papers 2

1. if a 5-stage pipe-line is flushed and then we have to execute 5 and 12 instructions respectively then no. of cycles will be

- a. 5 and 12
- b. 6 and 13
- c. 9 and 16
- d. none

2. k-map  
ab

-----

c 1 x 0 0

1 x 0 x

solve it

- a. A.B
- B. ~A
- C. ~B
- D. A+B

3. CHAR A[10][15] AND INT B[10][15] IS DEFINED WHAT'S THE ADDRESS OF A[3][4] AND B[3][4] IF ADDRESS OF A IS 0X1000 AND B IS 0X2000

- A. 0X1030 AND 0X20C3
  - B. 0X1031 AND 0X20C4
- AND SOME OTHERS..

4. int f(int \*a)

```
{ int b=5;
```

```
a=&b;
```

```
}
```

```
main()
```

```
{ int i;
```

```
printf("\n %d",i);
```

```
f(&i);
```

```
printf("\n %d",i);
```

```
}
```

what's the output .

1.10,5

2,10,10

c.5,5

d. none

5. main()

```
{ int i;
```

```
fork();
```

```
fork();
```

```
fork();
```

```
printf("----");
```

```
}
```

how many times the printf will be executed .

a.3

b. 6

- c.5
- d. 8

6.

```
void f(int i)
{ int j;
for (j=0;j<16;j++)
{ if (
i
&
(
0x8000>>j))
printf("1");
else
printf("0");
}}
```

what's the purpose of the program

- a. its output is hex representation of i
- b. bcd
- c. binary
- d. decimal

7.#define f(a,b) a+b

#define g(a,b) a\*b

main()

```
{ int m;
m=2*f(3,g(4,5));
printf("\n m is %d",m);
}
```

what's the value of m

- a.70
- b.50
- c.26
- d. 69

8.main()

```
{
char a[10];
strcpy(a, "\0");
if (a==NULL)
printf("\a is null");
else
printf("\n a is not null");}
```

what happens with it .

- a. compile time error.
- b. run-time error.
- c. a is null
- d. a is not null.

9. char a[5]="hello"

- a. in array we can't do the operation .
- b. size of a is too large
- c. size of a is too small

d. nothing wrong with it .

10. local variables can be store by compiler

a. in register or heap

b. in register or stack

c .in stack or heap .

d. global memory.

11. average and worst time complexity in a sorted binary tree is

12. a tree is given and ask to find its meaning (parse-tree)

(expression tree)

ans.  $((a+b)-(c*d))$  ( not confirmed)

13. convert 40.xxxx into binary .

14. global variable

conflicts due to multiple file occurrence is resolved during

a. compile-time

b. run-time

c. link-time

d. load-time

15. Two program is given of factorial. one with recursion and one without recursion . question was which program won't run for very big no. input because of stack overflow .

a. i only (ans.)

b. ii only

c. i& ii both .

c. none

16.

struct a

```
{ int a;
```

```
char b;
```

```
int c;
```

```
}
```

union b

```
{ char a;
```

```
int b;
```

```
int c;
```

```
};
```

which is correct .

a. size of a is always diff. form size of b.(ans.)

b. size of a is always same form size of b.

c. we can't say anything because of not-homogeneous (not in ordered)

d. size of a can be same if