

Functions

Q1 What will be the output of the program?

```
#include <stdio.h>
void fun(int p);
int main()
{
    int a=1;
    fun(a);
    printf("%d\n", a);
    return 0;
}
void fun(int p)
{
    int d=2;
    p=d++;
    printf("%d", p);
}
```

p = 2

- A. 32
- B. 12
- C. 21
- D. 22

Answer: (A) X C

Q2 What will be the output of the program?

```
#include <stdio.h>
double fun(int, int, int);
int main()
{
    int a=4, b=6, c=7;
    double d;
    d=fun(a, b, c);
    printf("%lf\n", d);
    return 0;
}
double fun(int a, int b, int c)
{
    double s;
    s=a*b*c;
    return s;
}
```

- A. 27
- B. 27.000000
- C. 28
- D. 28.000000

Answer: (D) ✓

Q3 What will be the output of the program?

```
#include <stdio.h>
int abc(int u,int v);
int main()
{
    int a=24, b=16, c;
    c=abc(a,b);
    printf("%d\n",c);
    return 0;
}
int abc(int u, int v)
{
    int w;
    while (v)
    { w=u%v; u=v; v=w; }
    return u;
}
```

- A. 4
- B. 6
- C. 5
- D. 8

$$\begin{aligned}w &= 8 \\u &= 16 \\v &= 8\end{aligned}$$

$$\begin{aligned}w &= 0 \\u &= 8 \\v &= 0\end{aligned}$$

Answer: (D) ✓

loop exits

Q4 What will be the output of the program?

```
#include <stdio.h>
void fun(int x, int y);
int main()
{
    int a,b;
    a=5; b=10;
    fun(a,b);
    printf("%d %d\n",a,b);
    return 0;
}
```

```
void fun(int x, int y)
{
```

```
    int temp;
    temp=x; x=y; y=temp;
}
```

- A. 5 10
- B. 10 5
- C. 5 5

$$\begin{aligned}x &= 5 \\x &= 10 \\y &= 5\end{aligned}$$

D. 10 10

Answer: (B) X A

Q5 What will be the output of the program?

```
#include <stdio.h>
void increment();
int main()
{
    increment(); increment(); increment();
    return 0;
}
void increment()
{
    int x=0;
    x+=1;
    printf("%d ",x);
}
A. 1 1 1
B. 1 2 3
C. 2 3 1
D. 3 2 1
```

Answer: (A) ✓

Q6 What will be the output of the program?

```
#include <stdio.h>
int fun(int x, int y);
int main()
{
    int a=4,b=5,c=6;
    printf("%d\n",fun(2*a,fun(b,c)));
    return 0;
}
int fun(int x, int y)
{
    if (x==y) return (x);
    else return ((x+y)/2);
}
A. 3
B. 6
C. 8
D. 12
```

Answer: (B) ✓

$(5+6)/2 = 5$ int division

$(5+8)/2 = 6$ int division

Q7 What will be the output of the program?

```
#include <stdio.h>
int fun1(); 20
int fun2(); 15
void fun3(int,int);
int main()
{
    fun3(20fun1(),15fun2());
    return 0;
}
int fun1()
{
    int k=20;
    return k;
}
int fun2()
{
    int a=15;
    return a;
}
void fun3(int a, int b)
{
    int k; 7 35
    k=(a-b)*(a+b);
    printf("%d\n",k);
}
```

- A. 0
- B. 184
- C. 175
- D. compile error

Answer: (C)



Q8 What will be the output of the program?

```
#include <stdio.h>
void add();
int main()
{
    int i;
    for (i=0; i<3; i++)
        add();
    return 0;
}
void add()
```

```

{
    static int x=0;
    x++;
    printf("%d", x);
}

```

- A. 112
- B. 122
- C. 123
- D. 234

Answer: (C)

Q9 What will be the output of the program?

```

#include <stdio.h>
int f(int a);
int main()
{
    int a=2,i;
    for (i=0;i<3;i++) printf("%d ",f(a));
    return 0;
}

```

```

int f(int a)
{
    int b=0;
    static int c=3;
    b++; c++;
    return (a+b+c);
}

```

- A. 7 7 7
- B. 7 10 13
- C. 7 9 11
- D. 7 8 9

Answer: (D)

Q10 What will be the output of the program?

```

#include <stdio.h>
int test1();
int test2();
int main()
{
    int i,m,n;
    for (i=0;i<3;i++)
    {
        m=test1();
    }
}

```

```

        n=test2();
    }
    printf("%d,%d\n",m,n);
    return 0;
}
int test1()
{
    int x=0;
    x++;
    return x; 1
}
int test2()
{
    static int x=0;
    x++;
    return x; 1,2,3
}

```

- A. 1,1
- B. 1,3
- C. 3,1 ~~x~~
- D. 3,3 ~~x~~

Answer: (B) ✓