Name: **ANSWER KEY**

MINOR QUIZ

W7P*

Roll:

Sect:

P1

```
1   #include <stdio.h>
2   int main(){
3       int i = -4, sum = 0;
4       for( ; ; i++){
5           sum+=i;
6           i/=2;
7           if(i == 0)
8               break;
9       }
10      printf("%d",sum);
11      return 0;
12  }
```

Q1: What is the output of this code?
Note: whitespaces indicated using gray-colored characters as in Prutor

GOLD SOLUTION
-5

MAX MARKS
5

```
1   #include <stdio.h>
2   int main(){
3       int a[8]={1,2,3,4,5,6,7,8};
4       int prod = 1, i;
5       for(i = 1; i < 8; i*=2){
6           if(i % 4 == 0)
7               continue;
8           prod *= a[i];
9       }
10      printf("%d",prod);
11      return 0;
12  }
```

Q2: What is the output of this code?
Note: whitespaces indicated using gray-colored characters as in Prutor

GOLD SOLUTION
6

MAX MARKS
5

P2

```c
#include<stdio.h>
int main(){
    int a[8]={1,8,4,10,2,11,15,3};
    int sum = 0, mul, i;
    for(i = 0; i < 8; i++){
        mul = (i % 2 == 1)? 1 : -1;
        sum += mul*a[i-1];
    }
    printf("%d",sum);
    return 0;
}
```

```c
#include<stdio.h>
int main(){
    int a = 2, b = 0, prod = 1;
    while(b == 0){
        prod *= a;
        if (a % 3 == 1) break;
        else if(a % 3 == 2){
            a++;
            continue;
        }else
            b = 1;
            prod*=a;
    }
    printf("%d",prod);
    return 0;
}
```

Q1: Which is the incorrect line in this code? It is supposed to calculate the difference between sum of array elements at odd and even locations. E.g. the code, as given, is supposed to compute (1+4+2+15)-(8+10+11+3).

Q2: What is the output of this code? Note: whitespaces indicated using gray-colored characters as in Prutor

GOLD SOLUTION	GOLD SOLUTION
Solution 1: 5	18
Solution 2: 7	
Any of these solutions will receive full marks	

MAX MARKS	MAX MARKS
5	**5**

P3

```c
#include <stdio.h>
int main(){
    int sum = 0, i, a[6] = {1,2,4,8,16,32};
    for(i = -1; i < 6; ){
        if(i > 0)
            sum += a[i];
        i++;
    }
    printf("%0.2f",sum/6.0);
    return 0;
}
```

```c
#include <stdio.h>
int main(){
    int b = 0, a = 3;
    do{
        if(a % 3 == 0){
            a++,b++;
            printf("Elementary,");
        }
        if(b % 3 == 0) printf("my dear");
        if(b % 3 == 1) printf("Watson");
        b++;
    }while(b == 1);
    return 0;
}
```

Q1: Which is the incorrect line in this code? It is supposed to calculate the average of the elements in the array to two decimal places.

Q2: What is the output of this code? Note: whitespaces indicated using gray-colored characters as in Prutor

GOLD SOLUTION	GOLD SOLUTION
5	Elementary,Watson

MAX MARKS	MAX MARKS
5	**5**

P4

```
1   #include <stdio.h>
2   int main(){
3       int b = 9, prod = 1;
4       while(b--){
5           if(b % 5 == 4)
6               prod += 1;
7           else if(b % 5 == 3)
8               continue;
9           else if(b % 5 == 1)
10              break;
11          prod *= b;
12      }
13      printf("%d",prod);
14      return 0;
15  }
```

```
1   #include<stdio.h>
2   int main(){
3       int a[6] = {1,2,4,8,16,32};
4       int i, prod = 1;
5       for(i = 1; i <= 32; i *= 2)
6           prod *= a[i];
7       printf("%d", prod);
8       return 0;
9   }
```

Q1: Which kind of error will this code produce?

Q2: What is the output of this code?
Note: whitespaces indicated using gray-colored characters as in Prutor

GOLD SOLUTION	GOLD SOLUTION
Runtime error (Segmentation fault, divide-by-zero etc)	7

MAX MARKS	MAX MARKS
5	**5**