Question 1: Syntax Error (C)

Code:

```c
int main() {
    int a = 10;
    if a > 5 {
        printf("Greater");
    }
    return 0;
}
```

Fix:

```c
#include <stdio.h>
int main() {
    int a = 10;
    if (a > 5) {
        printf("Greater");
    }
    return 0;
}
```

Explanation: Missing #include <stdio.h> and parentheses in if condition.

Question 2: Logical Error (C++)

Code:

```cpp
int sum(int a, int b) {
    return a - b;
}
```

Fix:

```cpp
int sum(int a, int b) {
    return a + b;
}
```

Explanation: Function named sum should add, not subtract.

Question 3: Infinite Loop Fix (C)

Code:

```c
int main() {
    int i = 0;
    while (i < 5);
    {
        printf("%d\n", i);
        i++;
    }
    return 0;
}
```

Fix:

```c
#include <stdio.h>
int main() {
    int i = 0;
    while (i < 5) {
        printf("%d\n", i);
        i++;
    }
    return 0;
}
```

Explanation: Semicolon after while causes infinite loop.

Question 4: Wrong Loop Condition (C)

Code:

```c
int main() {
    for (int i = 10; i > 0; i++) {
        printf("%d ", i);
    }
    return 0;
}
```

Fix:

```c
#include <stdio.h>

int main() {
    for (int i = 10; i > 0; i--) {
        printf("%d ", i);
    }
    return 0;
}
```

Explanation: i++ causes infinite loop; use i--.

Question 5: Incorrect Return Type (C)

Code:

```c
main() {
    printf("Hello");
}
```

Fix:

```c
#include <stdio.h>

int main() {
    printf("Hello");
    return 0;
}
```

Explanation: Return type and return statement are needed.

Question 6: Array Index Error (C)

Code:

```c
int main() {
    int a[3] = {1, 2, 3};
    printf("%d", a[3]);
    return 0;
}
```

Fix:

```c
#include <stdio.h>
int main() {
    int a[3] = {1, 2, 3};
    printf("%d", a[2]);
    return 0;
}
```

Explanation: Arrays are 0-indexed; a[3] is out of bounds.

Question 7: Wrong Format Specifier (C)

Code:

```c
int main() {
    float x = 5.2;
    printf("%d", x);
    return 0;
}
```

Fix:

```c
#include <stdio.h>
int main() {
    float x = 5.2;
    printf("%f", x);
    return 0;
}
```

Explanation: Use %f for float.

Question 8: Missing Header and Function Declaration (C)

Code:

```c
int main() {
    printf("Welcome");
    return 0;
}
```

Fix:

```c
#include <stdio.h>

int main() {
    printf("Welcome");
    return 0;
}
```

Explanation: printf requires #include <stdio.h>.

Question 9: Variable Not Initialized (C)

Code:

```c
int main() {
    int a;
    printf("%d", a);
    return 0;
}
```

Fix:

```c
#include <stdio.h>

int main() {
    int a = 0;
    printf("%d", a);
    return 0;
}
```

Explanation: Using uninitialized variable leads to undefined behavior.

Question 10: Function Not Called (C)

Code:

```c
void greet() {
    printf("Hi there");
}
```

Fix:

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

```c
void greet() {

    printf("Hi there");

}

int main() {

    greet();

    return 0;

}
```

Explanation: Function defined but never called.