**Chikara University Institute of Engineering and Technology**

**Department of Computer Science and Engineering**

**Object Oriented Programming**

**3rd Semester Batch-2022**

**SET-2**

1.Which keyword is used to define a constant variable in C++?

a) var

b) const

c) final

d) static

**Answer: b) const**

2. Which data type is used to store true or false values in C++?

a) int

b) bool

c) char

d) float

**Answer: b) bool**

3. Which preprocessor directive is used to define a macro in C++?

a) #include

b) #define

c) #ifdef

d) #ifndef

**Answer: b) #define**

4. Which decision-making construct in C++ allows for a single condition to be evaluated?

a) if

b) if-else

c) if-else-if ladder

d) switch case

**Answer: a) if**

5. Which repetitive construct in C++ is primarily used when the number of iterations is not known beforehand?

a) for loop

b) while loop

c) do-while loop

d) switch case

**Answer: b) while loop**

6. Which operator is used to access the value stored at the address pointed by a pointer in C++?

a) \*

b) &

c) ->

d) ::

**Answer: a) \***

7. Which keyword is used to allocate memory dynamically in C++?

a) new

b) malloc

c) allocate

d) create

**Answer: a) new**

8. Which keyword is used to deallocate memory in C++?

a) delete

b) free

c) deallocate

d) destroy

**Answer: a) delete**

9. Which keyword is used to refer to the current object within a member function in C++?

a) this

b) self

c) current

d) object

**Answer: a) this**

10. Which term describes a situation where a pointer points to a memory location that has been deallocated or no longer exists?

a) Dangling pointer

b) Null pointer

c) Wild pointer

d) Invalid pointer

**Answer: a) Dangling pointer**

**2 MARK MCQ**

1.What will be the output of the following C++ code?

#include <iostream>

int main() {

int x = 10;

int y = 3;

int z = x % y;

std::cout << z << std::endl;

return 0;

}

a) 1

b) 2

c) 3

d) 0

**Answer: a) 1**

2. What will be the output of the following C++ code?

#include <iostream>

int main() {

int num;

std::cout << "Enter a number: ";

std::cin >> num;

int fib1 = 0, fib2 = 1, fib;

std::cout << "Fibonacci series: ";

std::cout << fib1 << " " << fib2 << " ";

for (int i = 2; i < num; i++) {

fib = fib1 + fib2;

std::cout << fib << " ";

fib1 = fib2;

fib2 = fib;

}

std::cout << std::endl;

return 0;

}

a) The program will compile but no output will be displayed.

b) The program will display "Enter a number: ", wait for user input, and then display the Fibonacci series up to the input number.

c) The program will display "Enter a number: ", wait for user input, and then display the sum of the Fibonacci series up to the input number.

d) The program will display "Enter a number: ", wait for user input, and then display the average of the Fibonacci series up to the input number.

**Answer: b) The program will display "Enter a number: ", wait for user input, and then display the Fibonacci series up to the input number.**

Answer: a) 2

3. What will be the output of the following C++ code?

#include <iostream>

int main() {

int num;

std::cout << "Enter a number: ";

std::cin >> num;

bool isPrime = true;

for (int i = 2; i <= num / 2; i++) {

if (num % i == 0) {

isPrime = false;

break;

}

}

if (isPrime) {

std::cout << "Prime number" << std::endl;

} else {

std::cout << "Not a prime number" << std::endl;

}

return 0;

}

a) The program will compile but no output will be displayed.

b) The program will display "Enter a number: ", wait for user input, and then display "Prime number" if the input number is prime, or "Not a prime number" otherwise.

c) The program will display "Enter a number: ", wait for user input, and then display the number of prime numbers up to the input number.

d) The program will display "Enter a number: ", wait for user input, and then display the next prime number after the input number.

**Answer: b) The program will display "Enter a number: ", wait for user input, and then display "Prime number" if the input number is prime, or "Not a prime number" otherwise.**

4. What will be the output of the following C++ code snippet?

#include <iostream>

int main() {

int i = 0;

while (i < 5) {

std::cout << i << " ";

i++;

if (i == 3)

break;

}

return 0;

}

A. 0 1 2

B. 0 1 2 3 4

C. 0 1 2 3

D. No output will be displayed

**Answer: A. 0 1 2**

5. What will be the output of the following C++ code?

#include <iostream>

int main() {

int num;

std::cout << "Enter a number: ";

std::cin >> num;

int sum = 0;

for (int i = 1; i <= num; i++) {

sum += i;

}

std::cout << "Sum: " << sum << std::endl;

return 0;

}

a) The program will compile but no output will be displayed.

b) The program will display "Enter a number: ", wait for user input, and then display the sum of numbers from 1 to the input number.

c) The program will display "Enter a number: ", wait for user input, and then display the product of numbers from 1 to the input number.

d) The program will display "Enter a number: ", wait for user input, and then display the average of numbers from 1 to the input number.

Answer: b) The program will display "Enter a number: ", wait for user input, and then display the sum of numbers from 1 to the input number.