

**COMPUTER SCIENCE****CLASS : 12S (COMPUTER SCIENCE)**

iiO '07 Roll Number :	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Student's Name	<input type="text"/>									

DURATION : 60 MINUTES**TOTAL QUESTIONS : 40****MAXIMUM MARKS : 100**

- Note :
- Write your 11 digit iiO' 07 Roll Number and your name on top of the question Paper in the given space.
 - The question paper has 3 Sections. All the questions are of 2.5 marks each. Section (A) contains 30 questions, Section (B) contains 3 questions and Section (C) contains 7 questions each.
 - Do not start attempting the test paper until you are asked to do so.
 - Mark your Answers in the Answer Sheet with HB Pencil only.
 - The question paper contains 4 pages.
 - Please presume all header files are included in the Program based questions.

SECTION (A)

- The major goal of inheritance of C++ is:
(a) To facilitate the conversion of data types
(b) To help modular programming
(c) To facilitate reusability of code
(d) To hide the details of base classes
- In C++, the stream base class is :
(a) iostream (b) iofstream
(c) ios (d) None of the above
- What is a DONGLE ?
(a) A Hardware device used to enforce copy protection
(b) Power supply leads used in computers
(c) Term used to describe renegade programs
(d) Email Software
- Spooling is most beneficial in a multiprogramming environment where:
(a) most jobs are CPU bound
(b) most jobs are I/O bound
(c) jobs are evenly divided as I/O bound and CPU - bound
(d) None of these
- Which of the following statement is true for a protected member of a class?
(a) It can be used within that class as well as from outside of class.
(b) It can be used from private and public derived classes.
(c) It can only be used from protected derived classes.
(d) None of these
- A class that includes a virtual function is known as:
(a) virtual (b) polymorphic
(c) derived (d) None of these
- We can convert an infix expression to a postfix expression using a :
(a) Stack (b) Queue
(c) Dequeue (d) None of the above
- An exception is :
(a) A hardware problem
(b) A run time error
(c) A syntax error
(d) None of these
- When *continue* statement is executed within a loop, the control goes to
(a) Next statement in the loop
(b) The top of the loop
(c) Beginning of the program
(d) End of the program
- When the *break* statement is encountered inside a loop, which one of the following occurs?
(a) Control goes to the end of the program
(b) Control leaves the function that contains the loop
(c) Causes an exit from loop containing it
(d) None of these
- How many values can be returned from a function?
(a) 1 (b) 0
(c) More than 1 (d) None of the above

12. What is the default access specifier of a member in a structure?
 (a) Private (b) Public
 (c) Protected (d) None of these
13. In a class, data or functions designated private are accessible
 (a) to any functions of that class
 (b) to member functions of that class
 (c) only to public members of the class
 (d) only if you know the password
14. _____ is a collection of variables of any type referenced under one name.
 (a) Array (b) Structure
 (c) Class (d) None of these
15. Camel is to animal, as object is to
 (a) a member function
 (b) a class
 (c) an operator
 (d) a data item
16. What is the default access specifier of a member in a class?
 (a) Private (b) Public
 (c) Protected (d) None of these
17. Which one of the following is NOT true for the given statement:
The Inline functions do not work under the following situations:
 (a) For function that returns value and is having a goto statement
 (b) For function that does not return any value and is having a looping construct
 (c) If the function is recursive
 (d) None of these
18. Which access specifier does not allow further inheritance?
 (a) public (b) protected
 (c) private (d) None of these
19. Which is used for the termination of execution in a loop?
 (a) break (b) return
 (c) goto (d) continue
20. Find the output

```
class f {
    int func(int);
};
void main()
{
    cout<<sizeof(f);
}

```

 (a) 1 (b) 0
 (c) 2 (d) None of these
21. Find the output

```
void main()
{
    cout<<'\J';
}

```

 (a) J
 (b) \J
 (c) compiler error
 (d) None of these
22. The operator & is used for:
 (a) Bitwise AND
 (b) Bitwise OR
 (c) Logical AND
 (d) None of these
23. Integer Division results in:
 (a) Rounding the fractional part
 (b) Truncating the fractional part
 (c) Floating value
 (d) None of these
24. This is a general term for all forms of solid state memory that have a continuous source of power and do not need to have their memory contents periodically refreshed
 (a) nonvolatile memory
 (b) random access memory
 (c) volatile memory
 (d) None of these
25. Find the output :

```
void main()
{ int a[10],k;
  for(k=0;k<10;)
  { if (k%2==0)
    k=k+2;
    else
    k=k+1;
  }
  a[k]=k;
  cout<<k;
}

```

 (a) 10 (b) 8
 (c) 12 (d) None of these
26. Find the output :

```
int func(int z)
{
    return z+2;
}
void main()
{ int x,y; y=5;
  x=func(y);
  cout<<(x>7?"true":"false");
}

```

 (a) false (b) true
 (c) error (d) None of these

27. Find the output :
- ```
void main()
{ int a[5]={1,2,3,4,7};
 int *b;
 b=&a[4];
 cout<<b[-1];
}
```
- (a) 6  
(b) 7  
(c) 4  
(d) None of these

28. Find the output :
- ```
void main()
{
  int x=5;
  x=++x-3;
  cout<<x;
}
```
- (a) 4
(b) 3
(c) 6
(d) None of these

29. Find the output :
- ```
int func(int x,int y)
{ x=x+y; return x; }
void main()
{ int i=7;
 i=func(++i,i++);
 cout<<i; }
```
- (a) 17 (b) 19  
(c) 18 (d) None of these

30. Find the output :
- ```
void main() {
for(int i=0;i<18;i=i+2)
{ switch(i)
{ case 1:
  i+=2;
  break;
case 5:
  i+=5;
default: i+=4;
break;} }
cout<<i;
}
```
- (a) 18 (b) 25
(c) 27 (d) None of these

SECTION (B)

31. A man cycles from A to B, a distance of 21 km in 1 hour 40 min. The road from A is level for 13 km and then it is uphill to B. The man's average speed on level is 15 km/hr. Find his average uphill speed.
- (a) 12 km/hr (b) 10 km/hr
(c) 11 km/hr (d) 9 km/hr
32. The difference between the squares of two consecutive numbers is 35. The numbers are:
- (a) 14, 15 (b) 15,16
(c) 17,18 (d) 18,19
33. A, B and C are the three contestants in 1 km. race. If A can give B a start of 40 meters and A can give C a start of 64 meters, how many meters start can B give to C?
- (a) 50 meters (b) 25 meters
(c) 100 meters (d) 40 meters

SECTION (C)

34. How many numbers are immediately preceded and immediately followed by different numbers?

777575757777575757777575

- (a) 2
- (b) 3
- (c) 4
- (d) 5

35. In the question given below one term is missing. Based on the relationship of the two given words find the missing term from the given options.

BYDW:FVHT::GQIO:?

- (a) JLNP
- (b) QSTR
- (c) KMOL
- (d) KNML

36. Select the number from the given options to complete the series.

18,10,6,4,3,?

- (a) 8
- (b) 2
- (c) 3.5
- (d) 2.5

37. In a certain code BEAUTY is coded as 835247, DEVIL as 03916 and ABIDE as 58103. What does '3' stand for?

- (a) E
- (b) D
- (c) B
- (d) 0

Directions(Q38-Q40):Read the following directions and answer the questions given below:

Rajat, Sushhil and Nagesh play football, hockey and cricket. Rajat, Ramu and Nagesh play hockey, cricket and basketball. Rajat, Sushil, Mayank and Nagesh play football and cricket.

38. Which game is played by all the boys?

- (a) Hockey
- (b) Basketball
- (c) Football
- (d) Cricket

39. Who does not play football?

- (a) Rajat
- (b) Nagesh
- (c) Sushil
- (d) Ramu

40. Which of the following two boys play all the games?

- (a) Nagesh, Rajat
- (b) Mayank, Ramu
- (c) Ramu, Nagesh
- (d) Sushil, Mayank

