REV-01
MCA/11/16

2024/05

SET A

MASTER OF COMPUTER APPLICATION
SECOND SEMESTER (REPEAT)
OOPs
MCA-201

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs. **Full Marks: 70**

Objective

Time: 30 mins. **Marks: 20**

Choose the correct answer from the following: ***1×20=20***

1. Which of the following is true about the anonymous inner class?
   a. It has only methods
   b. Objects can't be created
   c. It has a fixed class name
   d. It has no class name

2. An interface with no fields or methods is known as a:
   a. Runnable Interface
   b. Marker Interface
   c. Abstract Interface
   d. CharSequence Interface

3. When is the object created with new keyword?
   a. At run-time
   b. At compile time
   c. Depends on code
   d. None of these

4. Identify the output of the following program.
   String str="abcde";
   System.out.print(str.substring(1,3));
   a. abc
   b. bc
   c. bcd
   d. cde

5. Identify the modifier which cannot be used for constructor.
   a. Public
   b. Protected
   c. Private
   d. Static

6. Exception created by *try* block is caught in which block?
   a. catch
   b. throw
   c. final
   d. none

7. Where is System class defined?
   a. Java.lang.package
   b. Java.util.package
   c. Java.io.package
   d. None of these

8. Which of the following is used to find and fix bugs in the program?
   a. JDK
   b. JVM
   c. JRM
   d. JDB

9. Identify the incorrect Java feature.
   a. Object oriented
   b. Use of pointer
   c. Dynamic
   d. Architectural neural

10. Which statement is true about Java?
    a. Java is a sequence-dependent programming language
    b. Java is a code dependent programming language
    c. Java is a platform-independent programming language
    d. Java is a platform-dependent programming language

11. Identify the incorrect constructor type.
    a. Friend
    b. Default
    c. Parameterized
    d. Copy

12. Data members and member functions of a class are private by default.
    a. Depends on code
    b. True
    c. False
    d. None

13. Under which pillar of OOPS does base class and derived class relationship come?
    a. Polymorphism
    b. Encapsulation
    c. Inheritance
    d. Abstraction

14. What is Inheritance in C++?
    a. Deriving new classes from existing classes
    b. Overloading of classes
    c. Classes with same names
    d. Wrapping of data into a single class

15. What is the value of a in below program?

```
int main()
{
int a, b=20;
a = 90/b;
return 0;
}
```

    a. 4.5
    b. 4.0
    c. 4
    d. Compilation Error

16. Which operator cannot be overloaded?
    a. +
    b. -
    c. *
    d. ::

17.

```
class Mycpp
{

};

int main()
{
Mycppobj;
  return 0;
}
```

    a. Nothing would be printed
    b. Compilation error
    c. Undefined
    d. None of the above

18. What is the scope of the variable declared in the user defined function?
    a. Whole program
    b. Only inside the {} block
    c. The main function
    d. Header section

19. What is an inline function?
    a. A function that is expanded at each call during execution
    b. A function that is called during compile time
    c. A function that is not checked for syntax errors
    d. A function that is not checked for semantic analysis

20. Which of the following feature is used in function overloading and function with default argument?
    a. Encapsulation
    b. Polymorphism
    c. Abstraction
    d. Modularity

-- --- --

Descriptive

Time : 2 hr. 30 mins. Marks : 50

[Answer question no.1 & any four (4) from the rest]

1. a) What is Object oriented programming? Define runtime polymorphism and data hidden properties of OOPs. 6+4=10
   b) What are the advantages of OOPs?
2. a) What is constructor? List out characteristics of constructor. 5+5=10
   b) Explain function overloading using example.
3. Explain types of inheritance with example. Write a program to explain virtual function in C++. 5+5=10
4. Write a program to convert meter to centimeter using basic to class type conversion. 10
5. Define stream. How can we read user defined values from standard input devices? Write programming statements to read all data from a predefined file. 3+3+4=10
6. What is exception? Why it is necessary for programming? Write a java program to input two distances and compare them. 2+2+6=10
7. Write about different input statements in java with examples. 10
8. Create a class to store the record of Account for holding the record of bank account holder. An account can be of two types-Saving account or Current Account. Saving account holder get interest on specific rate of interest and current account holder have an overdraft limit(withdraw/deposit amount up-to specific limit). Both type of Account have withdraw and deposit operation. Write a java programme to display the records of Current account and Saving account. 10

= = *** = =