

Roll No. :

Total No. of Questions : 11]

[Total No. of Printed Pages : 3

BPP-1091

M.Sc. (Previous) Examination, 2022

COMPUTER SCIENCE

MCS - 102

(Object Oriented Programming (OOP))

Time : 3 Hours]

[Maximum Marks : 50

Section-A

(Marks : 2 × 10 = 20)

Note :- Answer all *ten* questions (Answer limit **50** words). Each question carries **2** marks.

Section-B

(Marks : 3 × 5 = 15)

Note :- Answer all *five* questions. Each question has internal choice (Answer limit **200** words). Each question carries **3** marks.

Section-C

(Marks : 5 × 3 = 15)

Note :- Answer any *three* questions out of five (Answer limit **500** words). Each question carries **5** marks.

Section-A

1. (i) What is type Conversion ?
- (ii) What are Objects ? How are they created ?

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- (iii) What is Dynamic Binding ?
- (iv) What is Garbage Collection ?
- (v) What are used finalize methods ?
- (vi) What is String Buffer ?
- (vii) Who is the developer of Java ?
- (viii) What is Delegation ?
- (ix) What is Abstract Class ?
- (x) Differentiate between Static data member and Static member functions.

Section-B

2. Define Copy constructor in C++.

Or

Explain the use of Final Keyword in variable, methods and class.

3. What are the rules for virtual function with suitable example ?

Or

How can Templates be used for generic programming ?

4. What is Operator Overloading ? Write a C++ program illustrating overloading NEW and DELETE keyword.

Or

Write a program in Java containing a possible exception. Use a try block to throw it and a catch block to handle it properly.

5. Write the significance of Static Data Member in C++.

Or

Elaborate the structure of a C++ program.

6. Define Function Overriding. Compare it with function overloading in Java.

Or

Write short notes on the following :

- (a) THIS
- (b) SUPER
- (c) INLINE
- (d) *(asterisk)
- (e) INTERFACE.

Section–C

- 7. Describe in your own words what is meant by the term Dynamic Polymorphism with suitable example.
- 8. What is difference between an applet and a Java application ? Explain suitable example.
- 9. What are C++ access modifiers ? Explain with suitable example.
- 10. What are the different types of inheritance relationship ?
- 11. Explain the properties of Friend Function with suitable example.