

(For candidates admitted from 2008 - 2015 Batch)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

MATHEMATICS

COMPUTER PROGRAMMING IN C++

Time: Three hours

Maximum: 75 marks

PART A — (10 × 2 = 20)

Answer ALL questions.

1. Define OOP's.
2. Write some characteristics of Procedure – Oriented Programming.
3. Define Tokens with examples.
4. Write any two difference between Structure and Union.
5. Define Inline function.
6. Explain put () and get () functions.
7. Define stream.
8. Define Class.
9. Define Constructors.
10. Write down all the operators that cannot be overloaded.

PART B — (5 × 5 = 25)

Answer ALL questions, choosing either 'a' or 'b'

11. a) Briefly explain all the basic concepts of Object – Oriented Programming.
(OR)
b) Explain all the benefits and applications of OOP's.
12. a) Explain about four type of Storage Classes.
(OR)
b) Explain about Dynamical initialization of variables and type cast operators.
13. a) Explain Call by reference method with example.
(OR)
b) Write a brief note on formatted I/O operations.

14. a) Explain about defining member function inside and outside the class definition with simple example.
(OR)
b) Explain Parameterized constructor with example.
15. a) Define Operator overloading and write down all the rules of operator overloading.
(OR)
b) Write a short note on multiple inheritance with correct syntax and example.

PART C — (3 × 10 = 30)
Answer any THREE Questions

16. Explain about the issues to be addressed to face the software crisis and quality issues must for critical evaluation and features of Object Oriented Programming.
17. Explain Operators and Expressions in C++.
18. a) Write a brief note on default arguments.
b) Explain all the stream classes for console operations.
19. Write a brief note on:
(a) Friend function.
(b) Destructors with an example of C++ program.
20. Explain the following:
a) Hierarchical Inheritance.
b) Multi-level Inheritance.
c) Hybrid Inheritance.
d) Single Inheritance.
