

D-8/2110

5536/NJ

<b>Name of the Examination</b>		<b>BSc (CSM) 1<sup>st</sup> Sem</b>			
<b>Year of Examination</b>		<b>Dec, 2020</b>			
<b>Subject</b>		<b>Object Oriented Programming with C++</b>			
<b>Paper</b>		<b>CSM-117</b>			
<b>Title</b>		<b>Object Oriented Programming with C++</b>			
<b>Time Allowed</b>	<b>3 Hours</b>	<b>Maximum Marks</b>	<b>30</b>	<b>Min. Pass Marks</b>	<b>10.5</b>

**Note:** Candidates are required to attempt five questions in all, selecting two questions each from Section A and Section B and compulsory question of Section C.

<b>Section A</b>			
1.		What are the features of object oriented programming? How is it better than its predecessor programming paradigms? Explain.	4
2.		Define and distinguish between the following: a. Arrays and pointers b. Structures and union c. Parameter passing by address and parameter passing by reference	4
3.		Write a recursive function to generate n terms of Fibonacci series.	4
4.		Define preprocessor. Discuss in detail any five preprocessor with the help of suitable examples.	4
<b>Section B</b>			
5.		Define container class. How are these used? Give an example.	4
6.		What are the different types of constructors? Explain the use of each type of constructor giving examples.	4
7.		How polymorphism with pointers is implemented? Explain.	4
8.		Create a matrix class with a friend function for adding two matrices.	4
<b>Section E</b>			
9.		All questions are compulsory.	14
	a.	Define reference variable.	2
	b.	What are the multiple indirections?	2
	c.	What are bit fields?	2
	d.	Define constant function.	2
	e.	What do you mean by nested classes?	2
	f.	What is a pure virtual function?	2
	g.	How operators are overloaded using friend function?	2