

PG DEPARTMENT OF PHYSICS

KUMBALATHU SANKUPILLAI MEMORIAL DEVASWOM BOARD COLLEGE

www.ksmdbc.ac.in

Affiliated to University of Kerala

Managed by Travancore Devaswom Board

Value added course

On

Basics of C++

02-12-2020 to 20-02-2021

Overview of the course:

C++ is a compiled, general-purpose, case-sensitive, free-form programming language that supports procedural, object-oriented, and generic programming. C++ is regarded as a middle-level language, as it comprises a combination of both high-level and low-level language features. C++ was developed by Bjarne Stroustrup starting in 1979 at Bell Labs in Murray Hill, New Jersey, as an enhancement to the C language and originally named C with Classes but later it was renamed C++ in 1983. C++ is a superset of C, and that virtually any legal C program is a legal C++ program. C++ fully supports object-oriented programming and programs which are complex and large can be effectively executed by object-oriented programming. This includes programs for manufacturing and design, as well as mobile applications.

In this course we are intended to inculcate some basic knowledge of C++ including fundamental idea about object -oriented programming and its features. This course will help the students to get basic concepts of C++. The course is designed in such a way that after completing the course the student will be able

- Get a knowledge about the difference between C and C++
- Identify the Basic features of OOPs
- To do simple programming

Minutes of the Board of studies

The DLMC meeting started at 3.30 pm on 22nd November 2020. All the faculty members were present. The meeting discussed the topic and date of commencement of value - added course during the academic year. It is decided to offer a course on **Basics of C++**. The Head of the department is nominated as the chairperson and with the following faculty as the Board of Studies. The BoS convened on 23/11 2020 entrusted the members to design a course of 30 hrs duration and decided to start the programme on 2nd Dec 2020. The meeting came to an end at 4.45pm.

Members Present

Dr. Jayasree V.

Dr. Remya G. R.

Dr. ShemeenaBasheer N

Dr. Nisha S. Panicker

Ms. Sreelekshmy S. V.

PG Department of Physics
Kumbalathu Sankupillai Memorial
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Value added course: Basics of C++

Board of Studies

Sl. No	Name of Faculty	Designation	Department	Name of the Institution
1	Dr. K. S AnilKumar	Principal	Statistics	K.S.M.D.B College
2	Dr. Jayasree V.	Associate Professor & HOD	Physics	K.S.M.D.B College
3	Dr. Remya G. R.	Assistant Professor	Physics	K.S.M.D.B College
4	Dr. Shemeena Basheer N.	Assistant Professor	Physics	K.S.M.D.B College
5	Dr. Nisha S. Panicker	Assistant Professor	Physics	K.S.M.D.B College
6	Ms. Sreelekshmy S. V.	Assistant Professor	Physics	K.S.M.D.B College

**Kumbalathu Sankupillai Memorial
Devaswom Board College
PG Department of Physics**

**Value Added Course: Basics of C++
Action Plan**

Name of Course	Basics of C++
Eligibility of Admission	Final year students of B.Sc. & M.Sc.
Date of Starting	02-12-2020
Duration	3 months
Intake Capacity	40 students
Evaluation	Continuous Assessment and Exam
Teaching Faculty	Mr. Sanel, Assistant Professor, B. Voc. (Software Development) Sanel S Mail id. sanelsahadevan@live.com Phone : 9846502823 Mr. Emil Edison Assistant Professor, B. Voc. (Software Development) Mail id. emil350z@gmail.com Phone : 96339 25883
Fees	Nil

**Kumbalathu Sankupillai Memorial
Devaswom Board College
PG Department of Physics**

Basics of C++ – Syllabus and Evaluation Pattern

Objective:

The objective of this course is to inculcate basic knowledge and the salient features of C++. The student may be able to identify the data structure and syntax of programming and will be able to do simple programming.

Syllabus and books for study

VAC1041- BASICS OF C++

Unit 1: Introduction (6hrs)

Introduction to programming language, Object oriented programming, C++ and its features, Getting Started with C++ - Character set, Tokens- Keywords, Identifiers, Literals, Punctuators , Operators

Unit 2: Data types and Statements (10 hrs)

Data Types - Fundamental data types, User-defined data types, Derived data types, Variables, Variable initialization, The access modifier, Type modifiers, Expressions, Statements - Declaration statements, Assignment statements, Input statements, Output statements

Unit 3: Control Statements (6hrs)

Introduction to Programming, comments, Control Statements – if, if...else, nested if, else if ladder, switch, for, while, do...while

Unit 4: Arrays (5hrs)

Arrays, declaring arrays, Memory allocation for arrays, Array initialization, String handling using arrays, one dimensional array, two - dimensional array

Unit 5: Functions (3 hrs)

Concept of modular programming, Functions, Predefined functions, user defined functions

Books for study:

1. Programming in C++: D. Ravichandran, Tata Mc Graw Hill, 2011
2. Object oriented programming with C++: E. Balaguruswami, 5Edn., Tata Mc Graw Hill
3. Programming in C++: M.T. Somasekharan, PHI Pvt.Publishing,2005
4. BjerneStroustrup,The C++ Programming Language, Fourth Edition, Addison Wesley

Pattern of Evaluation*:

Continuous Assessment	1.Assignment	10 marks
	2. Test Paper	40 marks
End Term Examination		50 marks
Total		100 marks

* 50 marks is considered to be pass mark