DEPARTMENT OF PHYSICS

KUMBALATHU SANKUPILLAI MEMORIAL DEVASWOM BOARD COLLEGE

Affiliated to University of Kerala

Managed by Travancore Devaswom Board

Value added course

On

Basics of C++

11-11-2019 to 03-02-2020

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 2nd September 2019. 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 3/09/2019 entrusted the members to design a course of 30 hrs duration and decided to start the programme on 11 November 2019. The meeting came to an end at 4.40pm.

 Members Present

Smt. S.Leela

Smt. Meera S Anand

Dr. Jayasree V.

Dr. Remya G. R.

Dr. ShemeenaBasheer N

Department of Physics

Kumbalathu Sankupillai Memorial Devaswom Board College

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Board of Studies

Sl. No	Name of Faculty	Designation	Department	Name of the Institution
1	Dr. C. Unnikrishna Pillai	Principal	Malayalam	K.S.M.D.B College
2	Smt. S. Leela	Associate Professor & HOD	Physics	K.S.M.D.B College
3	Smt. Meera S Anand	Associate Professor	Physics	K.S.M.D.B College
4	Dr. Jayasree V.	Associate Professor	Physics	K.S.M.D.B College
5	Dr. Remya G. R.	Assistant Professor	Physics	K.S.M.D.B College
6	Dr. Shemeena Basheer N.	Assistant Professor	Physics	K.S.M.D.B College

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Value Added Course: Basics of C++

Action Plan

Name of Course	**Basics of C++**
Eligibility of Admission	**Final year students of B.Sc.**
Date of Starting	**11-11-2019**
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**

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Basics of C++ – Syllabus and Evaluation Pattern

Objective:

The objective of this course is to inculcate basic knowledge and the salient features of object - oriented programming. The student may 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 itsfeatures, 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, Stringhandling using arrays, one dimensional array, two - dimensional array

Unit 5: Functions (3 hrs)

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

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. BjorneStroustrup,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