### **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 05-12-2016 to 24-02-2017

#### Overview of the course:

C is a powerful, flexible, portable and elegantly structured programming language. Since C combines the features of high-level language with the elements of the assembler, it is suitable for both systems and applications programming. It is undoubtedly the most widely used general purpose language today in operating systems, and embedded system development. Its influence is evident in almost all modern programming languages. Since its standardization in 1989, C has undergone a series of changes and improvements in order to enhance the usefulness of the language.

In this course we are intended to inculcate some basic knowledge about nature of C including fundamental idea about C 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 other type of programming
- Identify the Basic features of C
- To do simple programming

#### Minutes of the Board of studies

The DLMC meeting started at 1.30 pm on 20<sup>th</sup> October 2016. 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 20/10 2016entrusted the members to design a course of 30 hrs duration and is decided to start the programme on 5<sup>th</sup> Dec 2016. The meeting came to an end at 2.00 pm.

Members Present

Smt.S Leela

Smt.Meera S Anand

Dr. Jayasree V.

# Department of Physics Kumbalathu Sankupillai Memorial Devaswom Board College

## Value added course: Basics of C

## **Board of Studies**

Sl. No	Name of Faculty	Designation	Department	Name of the Institution
1	Dr. K. Mohanakumar	Principal	Political Science	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	Assistant Professor	Physics	K.S.M.D.B College

# Kumbalathu Sankupillai Memorial Devaswom Board College

# **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.		
Date of Starting	05-12-2016		
Duration	3 months		
Intake Capacity	40 students		
Evaluation	Continuous Assessment and Exam		
Teaching Faculty	Mr.Vipin Kumar, Assistant Professor, Physics with Computer Application S.N.College, Kollam.		
	Mrs.Suki P Raj Assistant Professor, Physics with Computer Application S.N.College, Kollam.		
Fees	Nil		

# Kumbalathu Sankupillai Memorial Devaswom Board College

# **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 basics of C. 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, Importance of C, Basic structure of C

programs, Programming style, Executing a C program.

#### Unit 2: Constants, Variables and Data types (10 hrs)

Character set, C tokens, Constants, Variables, Data types, Assigning values to

variables, Declaring a variable as a constant, Defining symbolic constants,

Overflow and underflow of data.

#### Unit 3: Operators (6hrs)

Arithmetic operators, Logical operators, Increment and Decrement operators,

Conditional operator, Special operators.

#### Unit 4: Arrays (5hrs)

Arrays, declaring arrays, Memory allocation for arrays, Array initialization, ,one

dimensional array, two - dimensional array, Multidimensional array.

#### Unit 5: File management (3 hrs)

Defining and operating files, closing a file, I/O operations on file, Random

access to files.

#### **Books for study:**

- 1. Programming in ANSI C Sixth edition.: E. Balagurusamy
- 2. C Programming Language, Dennis M Ritchie, First Edition
- 3. Data Structures Using C, Reema Thareja, First Edition
- 4. Fundamentals, Data Structures and Problem Solving, E. Karthikeyan.

#### **Pattern of Evaluation\*:**

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

\* 50 marks is considered to be pass mark