20MCA132 – OBJECT ORIENTED PROGRAMMING LAB

Lab Report Submitted By

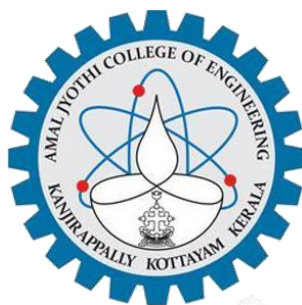## VIJAY VISHNU P B

Reg. No.: AJC21MCA-2109

In Partial fulfillment for the Award of the Degree Of

MASTER OF COMPUTER APPLICATIONS (2 Year)
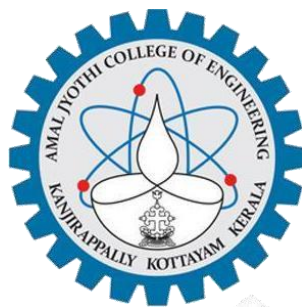## (MCA)
APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

AMAL JYOTHI COLLEGE OF ENGINEERING
KANJIRAPPALLY

[Affiliated to APJ Abdul Kalam Technological University, Kerala. Approved by AICTE, Accredited by NAAC with 'A' grade. Koovappally, Kanjirappally, Kottayam, Kerala – 686518]

2021-2022

DEPARTMENT OF COMPUTER APPLICATIONS
AMAL JYOTHI COLLEGE OF ENGINEERING
KANJIRAPPALLY

CERTIFICATE

This is to certify that the Lab report, **"20MCA132 OBJECT ORIENTED PROGRAMMING LAB"** is the bonafide work of **VIJAY VISHNU PB (Reg.No: AJC21MCA-2109)** in partial fulfillment of the requirements for the award of the Degree of Master of Computer Applications under APJ Abdul Kalam Technological University during the year 2021-22.

Rev.Fr.Dr.Rubin Thottupuram Jose

Lab In-Charge   **Head of the Department**

Internal Examiner   External Examiner

CONTENT

	initialize these data members and also include display function to display all the data members. Use array of objects to display details of N teachers		
12	Create a class 'Person' with data members Name, Gender, Address, Age and a constructor to initialize the data members and another class 'Employee' that inherits the properties of class Person and also contains its own data members like Empid, Company_name, Qualification, Salary and its own constructor. Create another class 'Teacher' that inherits the properties of class Employee and contains its own data members like Subject, Department, Teacherid and also contain constructors and methods to display the data members. Use array of objects to display details of N teachers.	**18/05/2022**	**29**
13	Write a program has class Publisher, Book, Literature and Fiction. Read the information and print the details of books from either the category, using inheritance.	**18/05/2022**	**34**
14	Create classes Student and Sports. Create another class Result inherited from Student and Sports. Display the academic and sports score of a student.	**18/05/2022**	**39**
15	Create an interface having prototypes of functions area() and perimeter(). Create two classes Circle and Rectangle which implements the above interface. Create a menu driven program to find area and perimeter of objects	**24/05/2022**	**43**
16	Prepare bill with the given format using calculate method from interface.	**24/05/2022**	**47**
17	Create a Graphics package that has classes and interfaces for figures Rectangle, Triangle, Square and Circle. Test the package by finding the area of these figures.	**31/05/2022**	**50**
18	Write a user defined exception class to authenticate the user name and password	**31/05/2022**	**52**
19	Find the average of N positive integers, raising a user defined exception for each negative input.	01/06/2022	**54**

20	Define 2 classes; one for generating Fibonacci numbers and other for displaying even numbers in a given range. Implement using threads. (Runnable Interface).	01/06/2022	56
21	Program to create a generic stack and do the Push and Pop operations.	01/06/2022	58
22	ntain a list of Strings using ArrayList from collection framework, perform built-in Operations	07/06/2022	61
23	Program to demonstrate the creation of queue object using the Priority Queue class.	07/06/2022	62
24	Program to demonstrate the addition and deletion of elements in deque.	07/06/2022	64
25	Write a Java program to compare two hash set.	07/06/2022	65
26	Program to demonstrate the working of Map interface by adding, changing and removing elements.	07/06/2022	67
27	Program to find maximum of three numbers using AWT.	09/06/2022	71
28	Implement a simple calculator using AWT components	09/06/2022	73
29	Develop a program to handle all mouse events and window events	09/06/2022	76
30	Develop a program to handle Key events	09/06/2022	78
31	Write a program to write to a file, then read from the file and display the contents on the console.	31/05/2022	80
32	Write a program to copy one file to another.	31/05/2022	82
33	Write a program that reads from a file having integers. Copy even numbers and odd numbers to separate files.	31/05/2022	83