



Sub: -OOP & DS

Assignment No-1

Sem.:- III Sem.

Last Date: - **08/08/2017**

Bloom's Taxonomy Levels – 1. Remember 2. Understand 3. Apply 4. Analyze 5. Evaluate 6. Create

Question no 1, 2, 3 are based on CO304.1 - Describe the concept of procedural languages and implement the concept of object oriented programming using C++ programs.

Question no 4, 5, 6 are based on CO304.2- Implement the feature of OOPs using generic programming method.

Que. No	Question	BTL level
Q.1	Explain the benefits and application of OOPs.	L1
Q.2	Write a program to declare a class student with members name, roll_no, address, take the data of two student and display the information.	L3
Q.3	Write a C++ program to find area of circle and rectangle by using default and parameterized constructor.	L3
Q.4	Explain dynamic memory allocation and de-allocation.	L1
Q.5	What is operator overloading? Explain the constraints of overloading an unary increment/ decrement operator and how it can be overcome.	L1
Q.6	Write a program to overload the operator '+'.	L3

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Subject Teacher



K.D.K. COLLEGE OF ENGINEERING NANDANVAN, NAGPUR-09

DEPARTMENT OF ELECTRONICS ENGINEERING

SESSION 2018-19



Sub: -OOP & DS

Assignment No-II

Sem.:- III Sem.

Last Date: - 23.09.2018

Bloom's Taxonomy Levels – 1. Remember 2. Understand 3. Apply 4. Analyze 5. Evaluate 6. Create

Question no 1, 2, 3 are based on CO304.3 - Describe the concept of inheritance and implement its various methods using C++ Programs.

Question no 4, 5, 6 are based on CO304.4- Describe the use pointer in data structure using array and implement it using sorting and searching methods.

Que. No	Question	BTL level
Q.1	Explain run-time polymorphism using virtual function.	L1
Q.2	Write a program using multiple inheritance to get the data from two base classes and display it by using are derived class.	L1
Q.3	Design three classes : Student, exam and result. The student class has data members: roll_no, name, semester, branch etc. Create class exam by inheriting the student class. The exam class contains data members : Marks in three subjects and maximum marks. Derive the class result from exam class and it has its own data members such as percentage grade. Write a C++ program to model this relationship. What type of inheritance this model belongs to ?8	L3
Q.4	Find the expected number of passes, comparison and exchange for bubble sort when the given sequence is as follows.7, 1, 3, 4, 10, 9, 8, 6, 5, 25	L1
Q.5	Write a C++ program using linear search technique to search a number in an array of 256 integers.	L3
Q.6	Sort the following array. 24, 9, 3, 48, 61, 2, 19, 55, 7, 21.Using. i) Insertion sort. ii) Bubble sort.	L4

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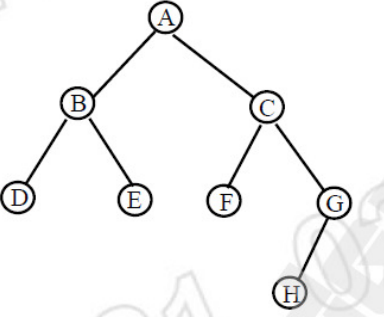


Last Date: - 02.10.2018

Bloom's Taxonomy Levels – 1. Remember 2. Understand 3. Apply 4. Analyze 5. Evaluate 6. Create

Question no 1, 2, 3 are based on CO304.5 - Analyse the concept of Stack, Linked List and Queue and implement its algorithm using C++ Program.

Question no 4, 5, 6 are based on CO304.6- Analyse the concept of TREE and its traversals using C++ Program.

Que. No	Question	BTL level
Q.1	WAP to implement stack using linked list. Compare a)Stack and Queue b)Linked list and array.	L2
Q.2	Write a program in C++ to insert and delete following element from keyboard in Queue and display on the output Screen : A, B, C, D, E.	L3
Q.3	Explain the concept of queues using link list and what operations can be performed on queues.	L1
Q.4	Explain the concept of threaded binary tree. Write a function to obtain in order traversal of threaded binary tree.	L1
Q.5	Suppose in-order and pre-order is given: In-order: 4, 7, 2, 8, 5, 1, 6, 9, 3 Pre-order: 1, 2, 4, 7, 5, 8, 3, 6, 9. Draw a tree and write its post-order traversal expression.	L3
Q.6	Write in-order, preorder and post-order traversal of following tree. 	L3

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