Lesson Plan

Name of the Faculty : DR. RASHMI DAHRA (PROFESSOR)

Discipline : BCA

Semester : 4TH

Subject : Object Oriented Programming (BCA-210 B) and

SOFTWARE LAB.-VIII (BCA-230B)

Lesson Plan Duration : 15 weeks (from January, 2018 to April, 2018)

Work Load (Lecture/Practical) per week (in hours):Lecture: 3, Practical:2

| Week | Theory | | Practical | | |
|------|------------------|---------------------------|-----------------|----------------------|--|
| | Lecture | Topic(including | Practical | Topic | |
| | Day | Assignment/Test) | Day | | |
| 1st | 1 st | Overview of procedural | 1 st | Basic program in c++ | |
| | | and object oriented | | | |
| | | approach | | | |
| | 2 nd | Characteristics of OOP, | 2 nd | Basic program in c++ | |
| | | polymorphism | | | |
| | | ,encapsulation etc. | | | |
| | 3 rd | User defined types | | | |
| | T1 | Tutorialreview of | | | |
| | | lectures | | | |
| 2nd | 4 th | Started with C++: syntax, | 3 rd | Basic program in c++ | |
| | | data types, variables, | | | |
| | 5 th | Strings in c++ | 4 th | Program on strings | |
| | 6 th | Assignment on above | | | |
| | | topics/ Test 1 | | | |
| | T2 | Tutorialproblem/review | | | |
| | | of lectures | | | |
| 3rd | 7 th | Functions | 5 th | Program on functions | |
| | 8 th | Operators, Recursion | 6 th | Program on recursion | |
| | 9 th | Array and pointer | | | |
| | T3 | Tutorialproblem/ | | | |
| | | review of lectures | | | |
| 4th | 10 th | Structures with examples. | 7 th | Program on structure | |
| | 11 th | Concept of inline | 8 th | Program on inline | |
| | | functions and default | | function and default | |
| | | arguments | | arguments | |
| | 12 th | Assignment on above | | | |
| | | topics/ Test 2 | | | |

| | T4 | Tutorialproblem/review of lectures | | |
|------|--------------------------------------|---|------------------|--|
| 5th | 13 th | Memory allocation and static members | 9 th | Program using static members |
| | 14 th | Memory Management: new, delete, , assignment operator | 10 th | Program on memory management and using class |
| | 15 th | Classes, private and public | | |
| | T5 | Tutorialproblem/review of lectures | | |
| 6th | 16 th | Further discussion on classes and member functions | 11 th | Program using classes |
| | 17 th | Constructor and Destructor | 12 th | Program using constructor and destructor |
| | 18 th | Assignment on above topics/ Test 3 | | |
| 7th | 19 th | Derived Class and Base Class concept | 13 th | Program on inheritance |
| | 20 th | Different types of Inheritance | 14 th | Program explain concept of abstract |
| | 21 st | Overriding member function, Abstract Class | | functions and overriding |
| | T6 | Tutorialproblem/review of lectures | | |
| 8th | 22 nd | Public and Private Inheritance | 15 th | Program on inheritance |
| | 23 rd | Ambiguity in Multiple inheritance | 16 th | Program on inheritance |
| | 24 th | Assignment on above topics/ Test 4 | | |
| | T7 | Tutorialproblem/review of lectures | | |
| 9th | 25 th | Virtual functions | 17 th | Program on virtual function |
| | 26 th | Friend functions, Static functions | 18 th | Program on friend function and static |
| | 27 th | Function overloading | | function |
| | T8 | Tutorialproblem/review of lectures | | |
| 10th | 28 th | Constructors in inheritance | 19 th | Program on constructor in inheritance |
| | 29 th 30 th | Virtual base class Assignment on above | 20 th | Program on virtual base class |
| | | topics/ Test5 | | |

| | T TO | 1 + | T | |
|------|------------------|---------------------------|------------------|------------------------|
| | T9 | Tutorialproblem/review | | |
| | | of lectures | | |
| 11th | 31 st | Operator Overloading | 21 st | Program on operator |
| | | | | overloading |
| | 32 nd | Operator Overloading | 22 nd | Program on operator |
| | 33 rd | Type conversion | | overloading using |
| | | | | friend function |
| | T10 | Tutorialproblem/review | | |
| | | of lectures | | |
| 12th | 34 th | Exception and derived | 23 rd | Program on exception |
| | | class | | handling |
| | 35 th | Function exception | 24 th | Program on exception |
| | | declaration | | handling |
| | 36 th | unexpected exception, | | |
| | | exception when handling | | |
| | | exception | | |
| | T11 | Tutorialproblem/review | | |
| | | of lectures | | |
| 13th | 37 th | Template classes, | 25 th | Program on template |
| | | declaration, | | class |
| | 38 th | Template Functions | 26 th | Program on template |
| | 39 th | Assignment on above | 1 | function |
| | | topics/ Test6 | | |
| | T12 | Tutorialproblem/ | | |
| | | review of lectures | | |
| 14th | 40 th | Text versus Binary Files | 27 th | Program on files |
| | 41 st | Opening and Closing Files | 28 th | Program on files using |
| | 42 nd | File Pointers | | file pointer |
| 15th | 43 rd | Problem session | 29 th | |
| | 44 th | Problem session | 30 th | |
| | 45 th | Problem session | 1 | |

IMPORTANT DATES (KEY DATES)

* 14 to 16 February, 2018 (Wednesday -Friday)----- SESSIONAL I

*4 - 6 April, 2018 (Wednesday - Friday) ------ SESSIONAL II

*27 April, 2018 (Friday) ------ LAST DAY OF SESSION

*1 May to 8 May, 2018 (Tuesday-Tuesday)----- PRACTICAL EXAMINATION

Start of End semester examinations (Even Semester)-----11 May, 2018 (Friday) to 10 June, 2018 (Sunday)

(DR. RASHMI DAHRA)

PROFESSOR