Lesson Plan

Name of the Faculty : Ms. Vinny Sukhija (ASSTT. PROFESSOR)

Discipline : MCA

Semester : 4TH

Subject : JAVA Programming (MCA-504) /Practical Lab

(MCA 522)

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 Assignment/Test) | Practical Day | Topic |
| | Day | | | |
| 1st | 1 st | Features of Java, OOPs | 3 | |
| | | concepts, Java virtual | | |
| | | machine, | | |
| | 2 nd | Reflection byte codes, Byte | | |
| | | code interpretation, | | |
| | 3 rd | Assignment on above | | |
| | | topics/ Test 1 | | |
| | T1 | Tutorialreview of | | |
| | | lectures | | |
| 2nd | 4 th | Java Program | 1 st | Simple Java Program |
| | | Structure,Compile and run | | |
| | | java programs ,Java | | |
| | | character set, | | |
| | 5 th | Identifiers and keywords, | 2 nd | Programs to |
| | | Data types: declaration and | | Implement Type |
| | . th | definition | _ | Conversion |
| | 6 th | Expressions and Statements | | |
| | T2 | Tutorialproblem/review | | |
| | | of lectures | | |
| 3rd | 7 th | Operators | 3 rd | Programs to |
| | | | | Implement operators |
| | 8 th | Operators | 4 th | Programs to |
| | 9 th | Control Structures | | Implement control |
| | | | | structure |
| | T3 | Tutorialproblem/ | | |
| | | review of lectures | | |
| 4th | 10 th | looping structures | 5 th | Programs to |
| | | | | Implement looping |
| | | | | Structure |

| | 11 th | Introduction to arrays: Defining and processing | 6 th | Programs to Implement 1D and 2D |
|------|------------------|---|------------------|--|
| | a o th | an array, 1-Dim Arrays | | Array. |
| | 12 th | Array:2D | | |
| | T4 | Tutorialproblem/review of lectures | | |
| 5th | 13 th | Array Functions, Passing arrays to functions | 7 th | Programs to Implement Array Function |
| | 14 th | String and string function | 8 th | Programs to |
| | 15 th | Objects and classes: function overloading and constructor overloading | | Implement String function |
| | | constructor eventualing | | Program to implement Object and classes |
| | T5 | Tutorialproblem/review of lectures | | |
| 6th | 16 th | Inheritance:simple and multiLevel | 9 th | Program to implement Inheritance |
| | 17 th | Polymorphism: Run Time | 10 th | Program to implement |
| | 18 th | Assignment on above topics/ Test 3 | | polymorphism |
| 7th | 19 th | Abstract classes, | | Program to implement abstract classes |
| | 20 th | Static classes, Inner classes | 11 th | Program to implement |
| | 21 st | Wrapper classes | 12 th | static classes and Wrapper classes |
| | T6 | Tutorialproblem/review of lectures | | |
| 8th | 22 nd | Interfaces | 13 th | Program to implement interface |
| | 23 rd | This, Super, Access control | 14 th | Program to implement |
| | 24 th | Assignment on above topics/ Test 4 | | super and This |
| | T7 | Tutorialproblem/review of lectures | | |
| 9th | 25 th | Packages | 15 th | Program to implement packages |
| | 26 th | Exception handling: Exception as objects, Exception hierarchy, Try catch finally, Throw | 16 th | Program to implement Exception handling |
| | 27 th | User defined Exception | | |
| | Т8 | Tutorialproblem/review of lectures | | |
| 10th | 28 th | IO package:Input streams, Output streams, Filter and pipe streams | 17 th | Program to implement byte stream |

| | 29 th | Object serialization, Deserialization | 18 th | Program to implement character stream |
|------|------------------|--|------------------|--|
| | 30 th | ,Sample programs on IO files | | |
| | Т9 | Tutorialproblem/review of lectures | | |
| 11th | 31 st | Multi threading: Thread Life cycle, Multi threading advantages and issues, | 19 th | Program to implement Multithreading |
| | 32 nd | Simple thread program, Thread synchronization | 20 th | Program to implement AWT |
| | 33 rd | Introduction to AWT programming | | |
| | T10 | Tutorialproblem/review of lectures | | |
| 12th | 34 th | Layout and component managers, Event handling | 21 st | Program to implement Layout Manager |
| | 35 th | Layout and component managers, Event handling | 22 nd | Program to implement Layout Manager |
| | 36 th | Layout and component managers, Event handling | | |
| | T11 | Tutorialproblem/review of lectures | | |
| 13th | 37 th | Assignment/Test on above topics | 23 rd | Assignment/Test on above topics |
| | 38 th | Applet class: Applet life- cycle, | 24 th | Program to implement Applet |
| | 39 th | Passing parameters embedding in HTML | | |
| | T12 | Tutorialproblem/ review of lectures | | |
| 14th | 40 th | Swing components – JApplet, JButton, JFrame, etc | 25 th | Program to implement Swing |
| | 41 st | Revision | 26 th | Lab Assignments |
| | 42 nd | Problems & Revision | | |
| 15th | 43 rd | Problem session | +6 | Lab Assignments |
| | 44 th | Problem session | 27 th | Lab Assignments |
| | 45 th | Problem session | 28 th | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

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) |
| |
| (Ms Vinny Sukhija) |
| (Asst PROFESSOR) |