VCD/ SYCS SEM III JAVA BASED APPLICATION DEVELOPMENT 75M 2$^{1/2}$ HR
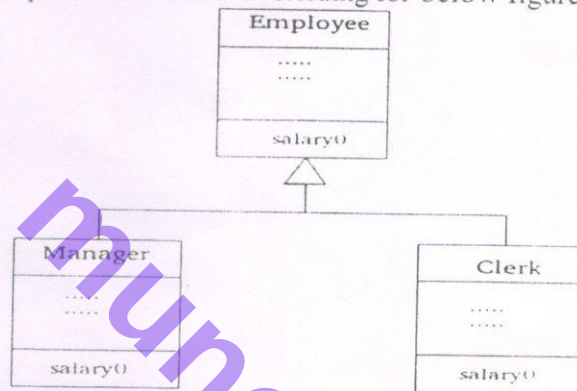
N.B. 1) All questions are compulsory.
2) Figures to the right indicate marks.
3) Illustrations, in-depth answers and diagrams will be appreciated.
4) Mixing of sub-questions is not allowed.

Q.I Answer the following (Any four) 20 Mark

a. Explain JVM in detail.
b. Explain encapsulation with proper example.
c. Explain different ways for Thread creation.
d. Write a program to perform method overriding for below figure

e. Explain the concept of try and catch with proper example.
f. Write short n predefined packages.

Q.II Answer the following .(Any four) 20 Mark
a. Write a program to demonstrate Map interface methods.
b. Explain in detail Java Print Service API.
c. Explain JScrollbar with proper example.
d. Write a program to construct a simple calculator using the JAVA Swings with minimum functionality.
e. Explain JDBC Connectivity Model.
f. Explain Event listener interfaces.

Q.III Answer the following.(Any four) 20 Mark
a. Explain ServletContext object with proper example.
b. Write a Servlet that accepts a User Name from a HTML form and stores it as a session variable. Write another Servlet that returns the value of this session variable and displays it.
c. Explain in detail JSP Standard Tag Libraries in detail.
d. Explain in detail the JSP Life Cycle.
e. Explain the concept of JSON.
f. Differentiate JSON and XML.

Q.IV   Answer the following.(Any three)   15 Mark

   a.   Explain the concept of abstraction.
   b.   Write a program to demonstrate multilevel inheritance.
   c.   Explain ResultSet in detail.
   d.   Explain JSON Schema in detail.
   e.   Write a program to demonstrate a table in swing.
   f.   Explain JSP architecture in detail.

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