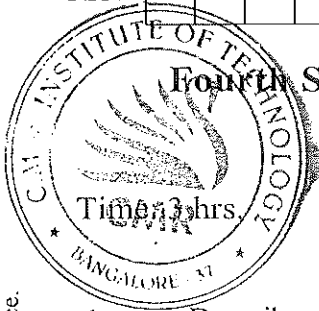


USN

13MCA42



Fourth Semester MCA Degree Examination, Dec.2019/Jan.2020

Advanced Java Programming

Max. Marks:100

Note: Answer any FIVE full questions.

- 1 a. Describe Servlet. Illustrate the phases of the servlet life cycle with appropriate method implementation. (10 Marks)
- b. Briefly explain the different HTTP request headers and different methods to handle it in servlet. (10 Marks)
- 2 a. Write a Java Servlet Program that handles Form Data. (10 Marks)
- b. What is Session Tracking? Explain different techniques of session tracking with the help of examples. (10 Marks)
- 3 a. Explain different types of JSP Scripting elements with examples. (10 Marks)
- b. How JSP works? Explain with a neat diagram, (10 Marks)
- 4 a. Write a JSP program to implement verification of a particular user login and display Welcome page. (10 Marks)
- b. Explain the different types of JSP directive tags and list out attributes for page directive. (10 Marks)
- 5 a. Explain with examples the different JDBC data types. (10 Marks)
- b. Explain the steps in writing JDBC program with sample code. (10 Marks)
- 6 a. Explain about JARs in details. (07 Marks)
- b. What are Annotations? Explain built in annotations. (08 Marks)
- c. Define Java Beans and its features. (05 Marks)
- 7 a. With the help of a neat block diagram, explain life cycle of a stateless session beans. (10 Marks)
- b. Explain briefly:
 - i) Message Driven Beans
 - ii) Entity Beans. (10 Marks)
- 8 Write a brief note on the following:
 - a. Instance Pooling
 - b. Dependency Injection
 - c. Introspection
 - d. Transaction Processing. (20 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.

16 DEC 2019