USN ☐☐☐☐☐☐☐☐☐☐

20MCA33

Third Semester MCA Degree Examination, July/August 2022
Advances in Java

Time: 3 hrs.   Max. Marks: 100

Note: *Answer any FIVE full questions, choosing ONE full question from each module.*

Module-1

1 a. Define Servlet. Explain the process servlet life cycle. **(10 Marks)**
   b. Briefly explain the different HTTP request headers and different methods of handle it in servlet. **(10 Marks)**

OR

2 a. Briefly explain any five HTTP status codes. **(10 Marks)**
   b. What is Session Tracking? Explain different techniques of session tracking with the help of example. **(10 Marks)**

Module-2

3 a. Explain the needs, benefits and advantages of JSP. **(10 Marks)**
   b. Explain different types of JSP scripting elements with an example. **(10 Marks)**

OR

4 a. Write any five different between Servlet and JSP. **(10 Marks)**
   b. Construct Scriptlets to make parts of the JSP page conditional. **(10 Marks)**

Module-3

5 a. Explain JSP Directives element. **(10 Marks)**
   b. Explain the following page directive attributes along with an example program.
      i) import   ii) session   iii) extends   iv) isErrorPage   v) isThreadsafe **(10 Marks)**

OR

6 a. Explain about JAR's in detail. **(10 Marks)**
   b. Define Java Bean and explain the terms introspection and customizers. Write sample code for Java Bean. **(10 Marks)**

Module-4

7 a. What are annotations? Explain Built-in annotations. **(10 Marks)**
   b. Explain the steps writing JDBC program with sample code. **(10 Marks)**

OR

8 a. Explain JDBC prepared statement object. **(10 Marks)**
   b. Briefly explain basic and advanced JDBC data types. **(10 Marks)**

Module-5

9 Briefly explain the following terms :   i) Message Driven Bean   ii) Dependency injection
   iii) Interceptors   iv) Naming and object stores. **(20 Marks)**

OR

10 a. List the difference between stateless session bean and stateful session bean. **(10 Marks)**
   b. Explain the life cycle of Message Driven Bean. **(10 Marks)**

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