

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)**

**CLASS: MCA
BRANCH: MCA**

**SEMESTER: IV
SESSION: SP/19**

SUBJECT: MCA7201 ADVANCED JAVA PROGRAMMING

TIME: 3 Hours

FULL MARKS: 60

INSTRUCTIONS:

1. The question paper contains 7 questions each of 12 marks and total 84 marks.
 2. Candidates may attempt any 5 questions maximum of 60 marks.
 3. The missing data, if any, may be assumed suitably.
 4. Before attempting the question paper, be sure that you have got the correct question paper.
 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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- Q.1(a) Write a program using swing components to multiply two numbers. Use text fields for inputs and output. [6]
Your program should display the result when the user press a button.
- Q.1(b) Discuss the role of event listeners to handle events with suitable example. Explain with suitable [6]
examples how to create menus in swings?
- Q.2(a) What is the use of JTabbed pane? How to create it? Explain with a program example. [6]
- Q.2(b) Write short notes on: [6]
- i) Features of JFC
 - ii) JFrame
 - iii) JComponent
- Q.3(a) What is JDBC? How do you execute SQL queries in JDBC? [6]
- Q.3(b) Describe the procedure to create Prepared Statements Object. Write a program to update data in the [6]
database using Prepared Statements.
- Q.4(a) What is the advantage of XML over HTML? How do they differ? Explain XML schema in brief. [6]
- Q.4(b) Explain the difference between DOM and SAX? How do we validate XML documents using DTD? [6]
- Q.5(a) Explain layered architecture of RMI? Does RMI-IIOP support dynamic downloading of classes? Justify your [6]
answer.
- Q.5(b) What is the significance of URL? How it is used? [6]
Explain the following classes with code snippet:
- I) InetAddress
 - II) URLconnection
- Q.6(a) Define the role of Request Dispatcher object. Write a servlet program to include the output of another [6]
JSP page into the current page.
- Q.6(b) Explain scriptlets and declarations in JSP page. What is servlet container? What role does it play? [6]
- Q.7(a) What are the various ways of passing parameters in EJB? State and explain any two annotations used for [6]
developing EJB.
- Q.7(b) Mention best ways for designing EJB-Based applications. [6]

:::29/04/2019 M:::