

**B.C.A Semester - 5 (Remedial) (CBCS) Examination****Feb/Mar. -2021 (NEW COURSE)****Advance Java Programming (J2EE)(Core)****Time: 1:30 Hours****Marks: 42****Instructions:**

1. Figures to the right indicate marks.
2. There are five questions in the question paper.
3. Answer any three of the following questions.

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- Q.1(A) Answer the following questions (03)
1. What is J2EE?
  2. What is meta data?
  3. What is ODBC?
- Q.1(B) Answer the following questions (ANY TWO) (06)
1. Explain JDBC architecture.
  2. Differentiate Statement, PreparedStatement and CallableStatement.
  3. What is Container? Explain briefly types of J2EE Containers.
  4. What is N-Tier architecture?
- Q.1(C) Answer the following questions (ANY ONE) (05)
1. Explain ResultSet methods with Example.
  2. Explain various J2EE APIs in brief.
- Q.2(A) Answer the following questions (03)
1. What is servlet?
  2. RMI stands for \_\_\_\_\_.
  3. To define remote interface in RMI, we should extend \_\_\_\_\_ class.
- Q.2(B) Answer the following questions (ANY TWO) (06)
1. Explain Servlet Architecture.
  2. Explain Servlet Life-cycle.
  3. Discuss Cookie Class in Servlet.
  4. Explain HttpSession.
- Q.2(C) Answer the following questions (ANY ONE) (05)
1. Explain Servlet Request with Example.
  2. Write a Demo Application that implements RMI using stub/skeleton.
- Q.3(A) Answer the following questions (03)
1. What is Java Bean?
  2. What is JSP?
  3. What is scope in JSP?
- Q.3(B) Answer the following questions (ANY TWO) (06)
1. Describe various directives in JSP.
  2. Explain JSP architecture.
  3. Write a diff. between include action & include directive.
  4. Explain various java beans properties.
- Q.3(C) Answer the following questions (ANY ONE) (05)
1. Explain exception handling in JSP with example.
  2. Explain <jsp:plugin> action with example .
- Q.4(A) Answer the following questions (03)
1. Define MVC.
  2. Define Session Beans.
  3. Define Entity Beans.

- Q.4(B) Answer the following questions (ANY TWO) (06)
1. Explain Timer service in EJB.
  2. Explain annotation in Hibernate.
  3. Discuss Life-cycle of EJB.
  4. Explain message driven beans.
- Q.4(C) Answer the following questions (ANY ONE) (05)
1. Discuss implementation of MVC in Web application.
  2. Explain Hibernate Sessions.
- Q.5(A) Answer the following questions (03)
1. What is Spring framework?
  2. What is AOP in spring framework?
  3. What is Struts?
- Q.5(B) Answer the following questions (ANY TWO) (06)
1. Explain Handling of Request parameter in Struts using FormBeans.
  2. How request is processed using Action objects in Struts.
  3. What is Inversion of Control in Spring framework?
  4. Explain benefits of Spring framework.
- Q.5 (C) Answer the following questions (ANY ONE) (05)
1. Explain Struts framework flow of control.
  2. Explain IoC in Spring framework.

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