# B. C. A. (Sem. V) (CBCS) Examination

## October - 2019

## CS-25 : Advance JAVA Programming (J2EE)

### *(New Course)*

**Faculty Code : 003**

**Subject Code : 003507**

Time : $2\frac{1}{2}$ Hours]　　　　　　　　　　　[Total Marks : **70**

**1** **(A)** Attempt the following :　　　　　　　　　　　**4**

    (1) The _____ logic resides at the middle tier.

    (2) Which API provides server-side software component level functionality in a J2EE application?

    (3) Which package needs to be imported for implementing JDBC API in a JDBC Program?

    (4) Which interface is used to call stored procedure in JDBC?

**(B)** Attempt any **one** of the following :　　　　　　　　**2**

    (1) Define the term JavaMail.

    (2) What is a Web Container?

**(C)** Attempt any **one** of the following :　　　　　　　　**3**

    (1) What is J2EE? Explain J2EE Platform using J2EE APIs.

    (2) List and explain any two types of JDBC drivers.

**(D)** Attempt any **one** of the following :　　　　　　　　**5**

    (1) What are Enterprise Architecture Styles? Explain N-Tier Architecture in detail using appropriate diagram.

    (2) Explain the JDBC-MySQL connectivity stepwise in detail with example.

**2** (A) Attempt the following : 4
  (1) A _____ for a remote object acts as a client's local representative or proxy for the remote object in RMI.
  (2) RMI stands for _____
  (3) Which package needs to be imported for a servlet?
  (4) _____ file is known as a Deployment Descriptor.

  (B) Attempt any **one** of the following : 2
  (1) Write a note on stub and skeleton.
  (2) What is a servlet?

  (C) Attempt any **one** of the following : 3
  (1) What is RMI? Explain RMI Architecture in detail.
  (2) Explain session mechanism in Servlet.

  (D) Attempt any **one** of the following : 5
  (1) Explain the Servlet Lifecycle in detail.
  (2) Write a Servlet to indicate page counter or the number of times user has visited the page.

**3** (A) Attempt the following : 4
  (1) _____ tag allows to write Java code into JSP file.
  (2) Which tag is used as start and end JSP in a JSP page?
  (3) Which tag is used for plugin mechanism in JSP page?
  (4) _____ are special classes that are serializable having a zero-argument constructor and allow access to properties using getter and setter methods and can be reused in a J2EE application.

  (B) Attempt any **one** of following : 2
  (1) What are including and forwarding techniques of JSP Pages?
  (2) Define : JSP Implicit Objects.

(C) Attempt any **one** of the following :                                3
   (1) List and explain JSP Action Elements.
   (2) Write a note on JavaBean Properties and Methods.

(D) Attempt any **one** of the following :                                5
   (1) Explain Life cycle of a JSP page in detail with its methods.
   (2) Explain Directive Elements of JSP in detail.

4 (A) Attempt the following :                                             4
   (1) The full form of EJB is _____
   (2) In MVC, the _____ defines java bean classes that internally define the system state and actions to change that state.
   (3) ORM stands for _____
   (4) _____ provides mapping information in Hibernate.

(B) Attempt any **one** of the following :                                2
   (1) Define the term MVC.
   (2) Give the full form of BMP and CMP.

(C) Attempt any **one** of the following :                                3
   (1) Write a note on Types of EJB.
   (2) Explain Hibernate configuration file.

(D) Explain any **one** :                                                 5
   (1) Explain the benefits of EJB.
   (2) What is Annotation in Hibernate? Explain the Hibernate inheritance in detail.

5 (A) Attempt the following :                                             4
   (1) _____ is a lightweight, loosely coupled integrated framework for developing Enterprise level Java applications.
   (2) IoC stands for _____
   (3) What is the full form of AOP?
   (4) Struts based applications use _____ in design pattern of an application.

(B) Attempt any **one** of following :     **2**
    (1) Give the definition of Spring Context.
    (2) What is Struts?

(C) Attempt any **one** of following :     **3**
    (1) Write a note on AOP in Spring.
    (2) Write a note on the Properties File in a Struts application.

(D) Attempt any **one** of following :     **5**
    (1) Explain Spring Architecture in detail.
    (2) Explain Struts Flow of Control.

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