DBK-003-0004502   Seat No. _____

B. Sc. (I.T.) (Sem. V) Examination

June - 2022

Advanced Java Programming : CS-26

(Old Course)

Faculty Code : 003

Subject Code : 0004502

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

Instructions : (1) Attempt any five from following questions.
                          (2) Each question carries equal marks.

1   (a)   Attempt the following :   **4**
              (1)   What is JDBC ?
              (2)   Parameterized query can be executed by _____.
              (3)   What does setAutoCommit (false) do ?
              (4)   Which is an object, acts as a gateway for the client side,
                    all the outgoing requests are routed through it and it
                    resides at the client side and represents the remote
                    object?
       (b)   Attempt the following :   **2**
              What is Skeleton ?
       (c)   Attempt the following :   **3**
              Write difference between statement and Prepared Statement
              interfaces.
       (d)   Attempt the following :   **5**
              List out and explain type of statement with example.

2   (a)   Attempt the following :   **4**
              (1)   Stored procedure can be called by _____.
              (2)   Which JDBC driver can be used in Servlet and Applet
                    both ?
              (3)   Type _____ driver is the fastest one.
              (4)   ____ exception is thrown by a remote method.

     (b)   Attempt the following :   **2**

Write 5 steps to connect java application with any database using JDBC.

     (c)   Attempt the following :   **3**

Differentiate RMI registry and OS agent.

     (d)   Attempt the following :   **5**

Write a java program that display record of the given rollno. [Table name: Stud] [Fields : rollno, name, class, div]

3   (a)   Attempt the following :   **4**

         (1)   Which class provides stream to read binary data such as image etc. from the request object ?

         (2)   Write use of sendRedirect() method.

         (3)   The life cycle of the servlet is managed by _____.

         (4)   How many objects of a servlet is created ?

     (b)   Attempt the following :   **2**

What is the difference between PrintWriter and Servlet Output Stream ?

     (c)   Attempt the following :   **3**

Differentiate GET and POST methods.

     (d)   Attempt the following :   **5**

Explain servlet life cycle.

4   (a)   Attempt the following :   **4**

         (1)   When is Servlet Object created ?

         (2)   Servlets are used to generate dynamic responses to HTTP requests. (State whether True/False)

         (3)   _____ is stateless protocol.

         (4)   MIME stands for _____.

     (b)   Attempt the following :   **2**

Explain Servlet Exception.

     (c)   Attempt the following :   **3**

Differentiate Generic Servlet and Http Servlet.

     (d)   Attempt the following :   **5**

Explain Session Tracking with example.

5   (a)   Attempt the following :   **4**
           (1)   What is filter ?
           (2)   If a web application has Servlet, Listeners and Filter classes. Which of them will be instantiated first ?
           (3)   _____ object used by the filters to get the next component invoked.
           (4)   Explain attribute Added() method.

           (b)   Attempt the following :   **2**
           Give the common task of the filter.

           (c)   Attempt the following :   **3**
           Explain Servlet Request Attrinute Listener.

           (d)   Attempt the following :   **5**
           Differentiate Filter and Listeners in servlet.

6   (a)   Attempt the following :   **4**
           (1)   What is Session Timeout ?
           (2)   What is Request Dispatcher ?
           (3)   _____ is an object that is invoked at the preprocessing and postprocessing of the request.
           (4)   _____ package is used for Http Session Activation Listener.

           (b)   Attempt the following :   **2**
           Write servlet listener configuration file.

           (c)   Attempt the following :   **3**
           Explain Filter Config.

           (d)   Attempt the following :   **5**
           Explain Event of listener.

7   (a)   Attempt the following :   **4**
           (1)   Default value of autoFlush() is _____.
           (2)   _____ action variables is used to include a file in JSP.
           (3)   How we specify directive in JSP ?
           (4)   Which scope is the most restrictive scope in JSP ?

           (b)   Attempt the following :   **2**
           Explain JSP declaration tag with example.

           (c)   Attempt the following :   **3**
           Explain scope of the JSP object.

           (d)   Attempt the following :   **5**
           Explain JSP scriplet with example.

8 (a) Attempt the following :   **4**
   (1) What is ContentType attribute ?
   (2) Why DB connections are not written directly in JSP ?
   (3) JSP have _____ number of implicit objects.
   (4) _____ is the initial contact point for handling a web
        request in a page centric-architecture.

   (b) Attempt the following :   **2**
   Differentiate include directive and include action.

   (c) Attempt the following :   **3**
   Write short note on Exception handling in JSP.

   (d) Attempt the following :   **5**
   Explain any two JSP implicit objects with example.

9 (a) Attempt the following :   **4**
   (1) MVC stands for _____.
   (2) List out JSTL tags.
   (3) What is model ?
   (4) Write main purpose of using EL.

   (b) Attempt the following :   **2**
   Explain advantages of MVC.

   (c) Attempt the following :   **3**
   Explain <c:set> with example.

   (d) Attempt the following :   **5**
   List out JSTL tag library and give appropriate example.

10 (a) Attempt the following :   **4**
   (1) Write use of <c:url>.
   (2) <c:choose> tag is just like a _____ java conditional
        statement.
   (3) _____ tag is useful to store value of variable.
   (4) What is the use of <c:catch> ?

   (b) Attempt the following :   **2**
   Explain <c:remove>.

   (c) Attempt the following :   **3**
   Explain advantages of JSTL.

   (d) Attempt the following :   **5**
   Explain basic operators in JSP – Expression Language.

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