Roll No. ▢▢▢▢▢▢▢▢▢▢▢▢▢   Total No. of Pages : 02

Total No. of Questions : 09

MCA   (Sem.–2)

ADVANCED JAVA

Subject Code : PGCA-1918
M.Code : 79617
Date of Examination : 08-07-22

Time : 3 Hrs.   Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION - B & C have FOUR questions each.
3. Attempt any FIVE questions from SECTION B & C carrying TEN marks each.
4. Select atleast TWO questions from SECTION - B & C.

SECTION-A

1) **Write briefly :**

    a) What are the events that are defined for sessions in servlets?

    b) What do you mean by JSP directive?

    c) What is the need of a Servlet filter?

    d) What are the core interfaces of Hibernate framework?

    e) What are the benefits of Struts framework?

    f) How does COBRA support interoperability?

    g) List the steps to define the remote interface using remote method invocation.

    h) What do you mean by BDK? List its components.

    i) List the advantages of JSP architecture.

    j) What is stateless session bean?

SECTION-B

2) Explain the use of Hibernate framework as the persistence layer for retrieving and storing plain old Java objects (POJOs) to a relational database.

3) List and explain various implicit objects in JSP with examples. Also, discuss the concept of object scope in JSP.

4) Explain the steps to design a small application in struts with database connectivity.

5) Discuss the concept of entity beans in Enterprise Java beans. What are the mechanisms used by entity beans to persist business data?

SECTION-C

6) Discuss the structure of HTTP request and response. Why is HTTP called a Stateless protocol?

7) Explain model-view-controller architecture in detail.

8) Explain the life-cycle methods of a servlet and discuss the complete process of servlet development with the help of a sample program.

9) Write short notes on :

   a. COBRA services

   b. JAR files

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.