

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.