PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MCA DEGREE EXAMINATION MAY 2023
(Second Semester)

Branch – COMPUTER APPLICATIONS

ADVANCED JAVA PROGRAMMING

Time: Three Hours   Maximum: 50 Marks

SECTION-A (5 Marks)
Answer ALL questions
ALL questions carry EQUAL marks   (5 x 1 = 5)

1. Which component is used to compile, debug and execute the Java programs
   - (i) JRE
   - (ii) JIT
   - (iii) JDK
   - (iv) JVM

2. How is the dynamic interception of request and responses to transform the information is done?
   - (i) servlet container
   - (ii) servlet config
   - (iii) servlet context
   - (iv) servlet filter

3. Which page directive should be used in JSP to generate a PDF page?
   - (i) content type
   - (ii) generatePdf
   - (iii) typePDF
   - (iv) contentPDF

4. Which of the following is not an Enterprise Beans type?
   - (i) Doubleton
   - (ii) Singleton
   - (iii) Stateful
   - (iv) Stateless

5. To address different JMS APIs, Spring provides?
   - (i) JmsTemplate
   - (ii) JmsTemplate102
   - (iii) both options a and b
   - (iv) JmsTemplate103

SECTION - B (15 Marks)
Answer ALL Questions
ALL Questions Carry EQUAL Marks   (5 x 3 = 15)

6. a. Draw the timeline for the history of J2EE.

   OR

   b. Write a note on connection interfaces in J2EE.

7. a. Explain the various stages of servlets life cycle in java

   OR

   b. Narrate the necessity for using "tracking session" in Java.

8. a. Write your own program to demonstrate the usage of JSP tags.

   OR

   b. Indicate the elements used in JSP with example program.

9 a. Summarize the interfaces used in EJB.

OR

    b. Illustrate the working procedure of JAR files of Java beans.

10 a. List out the Java Mail API classes.

OR

    b. Bring out the basic features JMS API.

SECTION -C (30 Marks)
Answer ALL questions
ALL questions carry **EQUAL** Marks   (5 x 6 = 30)

11 a. Explain the architecture of J2EE with example.

OR

   b. Paraphrase a clear note on the JDBC drivers.

12 a. Explain the strong assessment on the usage of Java servlets.

OR

   b. Collect the techniques used for session tracking in java.

13 a. Demonstrate the various control statements available in JSP.

OR

   b. Explain the procedure of handling of cookies in JSP.

14 a. List and explain the JavaMail API protocols.

OR

   b. Prepare a note on the building blocks of JMS applications.

15 a. Capture the features of Entity beans in EJB.

OR

   b. State the concepts related to web application security in EJB.

Z-Z-Z   END