

Progressive Education Society's Modern College of Arts, Science & Commerce Ganeshkhind, Pune – 16 (Autonomous)

End Semester Examination: MAR / APR 2025 Faculty: Science and Technology

Program: BSc(Comp05) Semester: VI SET: A

Program (Specific): BSc(Computer Science) Course Type: DSEC - III

Class: T.Y.BSc(Computer Science)
Name of the Course: Advanced Java

Max.Marks: 35
Time: 2Hr

Course Code: 24-CS-365

Paper: II

Instructions to the candidate:

1) There are 5 sections in the question paper. Write each section on separate page.

- 2) All Sections are compulsory.
- 3) Figures to the right indicate full marks.
- 4) Draw a well labelled diagram wherever necessary.

Q1) Solve the Multiple Choice Questions. a) Which of this interface must contain a unique element? (i) Set (ii) List (iii) Array (iv) Collection b) Inter-thread communication consists of following which methods, (ii) notify() (i) wait() (iii) notifyAll() (iv) All of the mentioned c) Which interface represents the result set of a database query? (i) ResultObject (ii) ResultQuery (iii) ResultSet (iv) All of the mentioned d) Features of Servlet include, (i) Efficient and Scalable (ii) Portable and Robust (iii) Powerful and flexible (iv) All of the mentioned e) AOP stands for ___ (i) Aspect Oriented Programming (ii) Aspect Originated Programming (iv) None of the mentioned (iii) Aspect Oriented Paging

Q2) Answer ANY FOUR of the following.

[4x1=4]

[5x1=5]

- a) Define map interface.
- b) State the use of wait ().
- c) Describe the use of get connection ().
- d) State the purpose of JSP directives.
- e) Define spring framework.
- f) Give the name of JDBC API.

Q3) Answer ANY FOUR of the following.

[4x2=8]

- a) How to create thread?
- b) List JDBC driver.
- c) Differentiate between set & list interface.
- d) Which JSP tag is used to give declaration?.
- e) What are the applications of spring?
- f) Define Servlet? State its advantages.

Q4) Answer ANY FOUR of the following.

[4x2=8]

- a) Write a JDBC program to accept details of Book (B_id, B_name, B_cost) from user & display it.
- b) List modules in Spring.
- c) Write a Java program in multithreading to display all the alphabets between 'A' to 'Z'. Each alphabet should display after two seconds.
- d) Compare statement & prepared statement interface.
- e) Write a servlet program to count the number of times a servlet has been invoked [use cookies].
- f) Write a note on TreeMap class.

Q5) Answer ANY TWO of the following.

[2x5=10]

- a) Discuss JDBC Architecture.
- b) Write a java program to accept 'n' numbers from user, store them into LinkedList collection. Display only odd numbers.
- c) Explain the servlet Life Cycle.
- d) Compare and contrast doGET() and doPOST() methods in Java.
