

**B.Sc. (I. T.) Sem. - IV (CBCS - 2015 Course) : SUMMER - 2019**  
**SUBJECT- ADVANCED JAVA**

Day: Saturday  
Date: 11/05/2019

S-2019-1279

Time: 10.00 a.m. to 01.00 p.m.  
Max. Marks: 60

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**N.B.:**

- 1) Attempt **ANY SIX** out of Eight.
  - 2) Figures to the right indicate **FULL** Marks.
  - 3) Draw neat, labeled **DIAGRAMS**, wherever necessary.
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- Q.1** a) How to create a Multithreaded Application in Java? Explain with a code snippet example. (05)
- b) State the difference between wait ( ) and sleep ( ) methods for Thread. (05)
- Q.2** What is ServletConfig and ServletContext? Explain it with suitable diagram and necessary code snippets. (10)
- Q.3** a) What are the steps to connect with a database using JDBC? (05)
- b) Define the following components of JDBC API - (05)
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|----------------------|--------------------|
| i) Statement         | ii) Driver Manager |
| iii) Connection      | iv) ResultSet      |
| v) Database Metadata |                    |
- Q.4** Explain the difference between Set and Map interfaces. Also explain each of the following with code snippet example: (10)
- |              |             |              |
|--------------|-------------|--------------|
| i) ArrayList | ii) TreeSet | iii) TreeMap |
|--------------|-------------|--------------|
- Q.5** Define JSP and its advantages as compared to Servlet? Define the JSP Life Cycle and illustrate with suitable diagram. (10)
- Q.6** What is Session Tracking Mechanism in Servlet? Explain ANY ONE of the mechanisms with a code snippet example and suitable diagram. (10)
- Q.7** How do we handle events in Swing application? Illustrate with diagram? (10)
- Q.8** Explain mechanism of Servlet collaboration with suitable diagram and elaborate it with a code snippet. (10)