

**M. SC. (Computer Science) SEM – II (Choice Based Credit & Grade System) : WINTER - 2018**

**SUBJECT: JAVA APPLICATION PROGRAMMING**

Day : Friday  
Date : 12/10/2018

Time: 03.00 PM To 05.00 PM  
Max. Marks: 60

**W-2018-1048**

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**N.B.:**

- 1) All questions are **COMPULSORY**.
  - 2) Figures to the right indicate **FULL** marks.
  - 3) Draw neat and labeled diagrams **WHEREVER** necessary.
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**Q.1** Describe various types of JDBC driver used for connectivity with their usage. (15)

**OR**

Differentiate between UDP and TCP with code.

**Q.2** A) Answer any **ONE** of the following: (08)

- i) Differentiate between JSP and servlet with code.
- ii) Elaborate the concepts of stub and skeleton.

**B)** Answer any **ONE** of the following: (07)

- i) Explain RMI architecture in brief.
- ii) Discuss various types of beans in Java.

**Q.3** Answer any **THREE** of the following: (15)

- a) What is meant by transaction management?
- b) Explain session tracking in JSP.
- c) Write a note on HTTP redirection.
- d) What is socket programming? Explain with example.
- e) Write JDBC code to connect 'employee' database.

**Q.4** Write short notes on any **THREE** of the following: (15)

- a) Connection pooling
- b) Cookies
- c) MVC architecture
- d) JDBC metadata
- e) Struts application framework

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