

**M. SC. (COMPUTER SCIENCE) SEM – II (CHOICE BASED
CREDIT & GRADE SYSTEM) : SUMMER - 2018
SUBJECT : JAVA APPLICATION PROGRAMMING**

Day : **Tuesday** Time : **03.00 PM TO 06.00 PM**
Date : **17/04/2018** **S-2018-0924** Max. Marks : 60

N.B.:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Draw neat and labeled diagram **WHEREVER** necessary.
-

Q.1 Write a Java program to perform insert, update and delete on [15]
Student(Student_ID, Name, Phone) table by using JDBC and MS-Access.

OR

Write a Java program by using socket programming for implementing a chat server.

Q.2 A) Answer **ANY ONE** of the following: [08]

- i) Differentiate between Session Bean and Entity Bean.
- ii) Describe role of TCP / IP and UDP in Networking.

B) Answer **ANY ONE** of the following: [07]

- i) Write a program to demonstrate Session Bean in EJB.
- ii) Explain various types of Statements in JDBC.

Q.3 Answer **ANY THREE** of the following: [15]

- a) Explain Object Serialization using RMI with example
- b) Explain Struts Framework.
- c) Write about JSP directives.
- d) What is Servlet? Describe different types of Servlets.
- e) Explain MVC Architecture in detail.

Q.4 Write short notes on **ANY THREE** of the following: [15]

- a) RMI architecture
- b) Session tracking
- c) JSP custom tag library
- d) JDBC metadata
- e) Thread safety

* * * *