Roll No. ☐☐☐☐☐☐☐☐☐☐☐          Total No. of Pages : 02

Total No. of Questions : 09

## M.Sc.(Computer Science) (2015 & Onwards)   (Sem.–2)
## ADVANCED JAVA PROGRAMMING
### Subject Code : MSC-201
### Paper ID : [A2570]

Time : 3 Hrs.                                        Max. Marks : 60

**INSTRUCTION TO CANDIDATES :**
1. **SECTIONS-A, B, C & D contains TWO questions each carrying TEN marks each and students has to attempt any ONE question from each SECTION.**
2. **SECTION-E is COMPULSORY consisting of TEN questions carrying TWENTY marks in all.**

### SECTION-A

Q1) What do you mean by Servlet & Servlet chaining? Explain it using suitable example?

Q2) What is session management & explain how it can be implemented using JDBC in Servlets?

### SECTION-B

Q3) Discuss Java Beans API in detail using suitable example.

Q4) What are Application building tools discuss them in detail?

### SECTION-C

Q5) Explain EJB with its architecture and requirements.

Q6) a)  Explain the Design & implementation of EJB.

b) Write short note on pushing data from RMI Servlet.

### SECTION-D

Q7) What do you mean by JSP? Explain JSP scripting elements and directives.

Q8) Describe the use of java beans in JSP for working with Java Mail.

**SECTION**-E

**Q9) Answer briefly :**

a) Explain Java web server

b) Write short note on Applet.

c) What are Stubs?

d) Explain RMI Client.

e) What are remote objects?

f) Write short note on J2EE.

g) Explain MVC and JSP.

h) Explain Servlet communication.

i) Discuss persistence customizers.

j) Discuss RMI Servlet.