

7. Explain the following with example :

- (a) Tomcat server and Testing tomcat [6]
- (b) Steps to install the Java software development. [5]
- (c) Anatomy of a JSP page [5]

Unit-IV

8. Why use JSP? What are steps to compile and executes the JSP applications ? What are JSP elements ? Explain with example. [16]

9. Discuss the following :

- (a) JDBC [5]
- (b) Database Programming [6]
- (c) Generating dynamic content [5]

Roll No.

67171

**M.C.A. 4th Sem.
(with New notes - M.M. 80.)**

Examination-May, 2016

Advanced Java Programming (New)

Paper-MCA-401

Time : 3 hours

Max. Marks : 80

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after the examination.

Note : There shall be nine questions. Question No. One will be **compulsory** and in addition to the compulsory question, students have to attempt **four** more questions selecting **one** from each unit. All questions shall carry equal marks.

[8×2=16]

1. (a) What is Javafx.sql.*?

(b) What is MVC ?

(c) What are Cookies ?

(d) What is customizes ?

(e) What is bean info ?

(f) What is session object ?

(g) What is applet tag ?

(h) What is war file ?

Unit-I

2. (a) How and why to use Java script language? Whether this language is complete? What are basic features of Java scripts? Explain to make dynamic HTML with Java script using example. [12]

(b) What is SAX and DOM ? Explain. [4]

3. (a) What is AWT programming? What are various components in AWT? Explain. [9]

(b) What is role of XML in data transfer?
How to present XML ? [7]

Unit-II

4. Why Swing component is better than AWT components? How to develop a light weight application using swing? Explain with writing codes of any five swing components. [16]

5. (a) How to use Java Bean? What is role of Java Bean in an application? Explain the Java Bean properties using example. [10]

(b) What is Java Beans API? Explain. [6]

Unit-III

6. Why Servlet is important in client-server based application? Explain all the components used in server-side programming architecture. [16]