PES University, Bengaluru
(Established under Karnataka Act 16 of 2013)

UC14MC602

NOVEMBER 2016: END SEMESTER ASSESSMENT (ESA) MCA. V SEMESTER

UC14MC602 - Advanced Java Programming

Time: 3 Hrs	Answer All Questions	Max Marks: 100

1.	a)	Compare and contrast ODBC and JDBC based applications.	5
	b)	Describe the various Web Application logics and the corresponding technologies applicable for each.	5
	c)	Write a Java Program to connect to the Oracle Database table "student" and accept student's rollno, name and marks. The input should be inserted into the table through prepared statement until the user choice is entered as "n" to terminate.	10
2.	a)	Write a note on 'response' and 'request' objects. Define 3 methods associated with each.	8
	b)	Mention the purpose of 'config' and 'work' folders in the Web Server directory.	2
	c)	i) List 4 http request methods defined in Servlets. ii) List 3 differences between 'get' and 'post'.	2+3
	d)	Design a Web application to validate login credentials and forward to another page with appropriate message on success. Display an error message on login failure within the login page. (Use static username and password for validation).	5
3	a)	Explain the need of JSP as compared to Servlets.	5
	b)	Describe 5 JSP actions.	5
	c)	Design a web application using JSPs to compute Simple Interest on the loan amount provided by the user (text box) along with years and rate of interest selected from the choices given (combo box).	10
4.	a)	Explain the 5 main component services of Java Beans.	10
	b)	Describe the purpose and usage of 5 annotations.	5
	c)	Design a JSP application using Java Beans to accept student rollno, name and marks of 3 subjects with a submit button. The JSP should process the data and display student rollno, name and percentage.	5
5.	a)	List 5 advantages of Spring Framework.	5
	b)	Define POJO. Write a POJO class to demonstrate loosely coupling.	5
	c)	With a neat diagram, explain 4 Spring modules.	10