PES
UNIVERSITY

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

UC15MC602/
UC14MC602

DECEMBER 2017: END SEMESTER ASSESSMENT (ESA) MCA. V SEMESTER

UC15MC602 / UC14MC602 - Advanced Java Programming

Time: 3 Hrs	Answer All Questions	Max Marks: 100

1.	a)	What is ODBC and how is it different from JDBC?	2
	b)	Explain the four JDBC drivers with neat diagram for each.	8
	c)	Define 5 JDBC interfaces.	5
	d)	Write a program to demonstrate the successful connection to the Oracle database.	5
2	a)	Discuss the folders created by Apache Server and its purpose.	5
	b)	Compare and contrast "Servlet Interface", "GenericServlet" & "HttpServlet".	3
	c)	List down the features of Servlet Context and Config objects with a use case for each.	5
	d)	Write the code snippets to demonstrate the implementation of sessions and cookies. Discuss the drawbacks and benefits of each.	5+2
3	a)	Discuss the advantages of JSP over Servlets, ASP, JavaScript and HTML.	4
	b)	Draw a neat flowchart to explain the JSP architecture.	5
	c)	Define the purpose of each JSP directive with example for each : 1) Include (2) Buffer (3) Session (4) isErrorPage (5) pageEncoding	5
	d)	Define and give example for each JSP action tag: 1) Include (2) Param (3) useBean	6
4.	a)	What are annotations? How are annotations classified. Give example for each.	6
	b)	Explain the four annotations used to build custom annotations.	8
	c)	What is a Java Bean? List its features and give an example.	1+5
5.	a)	Define a framework. Why do we need it? What are its advantages.	4
	b)	Draw a neat diagram of Spring framework architecture and describe 5 components.	5+5
	c)	Write a program and explain the steps involved in executing a "Hello World" program through Spring Framework MVC implementation using "xml" file.	6