Sardar Patel Institute of Technology
Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India

(Autonomous College Affiliated to University of Mumbai)

R E / makeup ~~End~~ Semester Examination

Jan 2020
~~Nov 2019~~

Max. Marks: 60
Class: S.Y.
Course Code: MCA 31
Name of the Course: Core and Advanced JAVA

Duration: 3 Hrs
Semester: III
Branch: M.C.A.

Instruction:
(1) All questions are compulsory
(2) Draw neat diagrams
(3) Assume suitable data if necessary

Q No.		Max. Marks	CO-BL-PI
Q. 1	Attempt any Four		
		12	
A.	Write the long form of the following 1. JVM 2. JRE 3. AWT 4. JDBC 5. JSP 6. AOP		1-2-2.2.2
B.	Write down Advantage of Java Package.		1-2-3.1.3
C.	Explain working of JVM.		1-2-2.2.2
D.	Write the difference between scanner and bufferreader		1-2-2.2.5
E.	What is the thread? Describe the complete life cycle of Thread.		1-2-2.2.4
F.	Write difference between implementing Runnable interface and extending Thread class		1-3-1.3.1
Q. 2 A.	Explain Bounded collection class with an example. List all the parameters for bounded collection class. What is the Substitution Principle? OR What are the three different kinds of statements? Explain with proper example of each.	06	2-2-2.2.2 2-2-2.1.2
Q. 2 B.	Write down Type of ResultSet used in result statement. Add three ways to execute the queries in JAVA.	06	2-3-2.1.2

Q. 3 A.	Write a comparison between BeanFactory and ApplicationContext	06	4-3-2.2.5
Q. 3 B	List and Explain Object states in Hibernate OR List and explain Core components of Hibernate	06	4-2-2.3.2
Q. 4 A.	List and Explain four different techniques used by Servlet application for session management with an example.	06	3-2-1.3.1
Q. 4 B	How a Servlet Application works. Compare between Generic servlet and HTTP servlet (Any three point)	06	3-2-2.2.5
Q. 5 A.	How JSP Processing is happening? Draw and explain four phases in JSP life cycle.	06	3-3-1.3.1
Q. 5 B	Design a HTML page for registration. Check the login credentials using HTTP servlet. On successful login forward the user information as cookies to next page. Display the user name in next page using session variable.	06	3-4-4.2.1