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CONTINUOUS INTERNAL ASSESMENT TEST IV-NOV- 2019

Second Year/Third Semester

MC5304-PROGRAMMING WITH JAVA

Time: 1.30 hours

Answer all questions

Maximum: 50 Marks

PART-A

(2 X 5=10 Marks)

1. What is considered as a web component
2. What is ORM?
3. What is meant by garbage collection?
4. What are sockets?
5. Write an example of Inet address.

PART-B

(13+13+14=40 Marks)

6. (a) What is a Web Framework? Present an outline of the Spring Framework with a diagram (13)

Or

6. (b) Explain about the Hibernate Architecture with neat diagram (13)

7. (a) What is garbage collection? Why it is needed? When is the garbage collection process invoked? Outline the garbage collection process (13)

Or

7. (b)(i) Present an outline of the URL Connection (5)
7. (b)(ii) Explain UDP client server socket interaction with a diagram (8)

PART-C

(14 Mark)

- 8 (a) A higher education institution wants to automate the student enrollment process. The details of student enrollment are stored in the following relations:

- i) Students(sid, sname)
- ii) Courses(cid, cname, credits)
- iii) TakenCourses (sid, cid, grade)

Design and implement appropriate java classes to support the student enrollment process. Write a java based web application using Servlet/JSP and JDBC with all the processes.

(OR)

- 8 (b) Write a Java Program to implement communication between a client and a server using TCP Sockets