FIFTH SEMESTER B.Voc. DEGREE EXAMINATION, NOVEMBER 2016

Software Development

SDC 5IT 18 (E2)—J 2EE

Time : Three Hours   Maximum : 80 Marks

Part A

*Answer **all** questions.*
Each question carries 1 mark.

1. MVC stands for _____.

2. Which of the following code retrieves the name and version of the protocol used ?

    (a) Header.getProtocol().

    (b) Response.getProtocol().

    (c) Request. getProtocol().

    (d) None of the above.

3. Which of the following is the correct order of servlet life cycle phase methods ?

    (a) init(), service(), destroy().

    (b) initialize(), service(), destroy().

    (c) init(), execute(), destroy().

    (d) init(), service(), delete().

4. When service() method of servlet gets called ?

    (a) The service() method is called when the servlet is first created.

    (b) The service() method is called whenever the servlet is invoked.

    (c) Both of the above.

    (d) None of the above.

5. Where filters are defined ?

    (a) In the deployment descriptor file web.xml.

    (b) In the jsp pages.

    (c) Both of the above.

    (d) None of the above.

6. Which of the following is an implicit object ?

    (a) pageContext.

    (b) servletContext.

    (c) httpContext.

    (d) sessionContext.

Turn over

7. A stored procedure is _____.

    (a)   A group of SQL statements that form a logical unit and perform a particular task.

    (b)   Stored procedures can be called using CallableStatement class in JDBC API.

    (c)   Both of the above.

    (d)   None of the above.

8. After executing an SQL query using Statement object, the data retrieved from the database holds in ————.

    (a)   Result set.   (b)   JDBC driver.

    (c)   Connection.   (d)   Statement.

9. SessionFactory is a thread-safe object. (True/False) :

10. What types of Dependency injection does spring supports ?

    (a)   Constructor based, Setter based.

    (b)   Constructor based, Setter based, Getter based.

    (c)   Setter based, Getter based, Properties based.

    (d)   Constructor based, Setter based, Properties based.

(10 × 1 = 10 marks)

Part B

Answer any **eight** *questions, not exceeding* **a paragraph** *of* 50 *words.*
Each question carries 2 marks.

11. Define three tier architecture.

12. How sendError method works ?

13. For what purpose doGet() method of a servlet used.

14. How to read http header information in servlet ?

15. What are the advantages of JSP over static HTML ?

16. What are JSP implicit objects ?

17. What is session attribute ?

18. What is prepared statement ?

19. How do you update a result set ?

20. What is Hibernate ?

21. Which method is used to update the state of the given instance from the underlying database ?

22. What is a Dispatcher Servlet ?

(8 × 2 = 16 marks)

Part C

Answer any **six** *questions, in a page of 250 words.*
Each question carries 4 marks.

23. What are the components of J2EE application ?

24. Explain about getHeader(), getParameter() and getProtocol() functions.

25. Explain the working of sendRedirect() method with an example.

26. What is the difference between config Object and pageContext Object ?

27. How do you implement hit counter in JSP ?

28. What are the basic steps to create a JDBC application ?

29. Which method is used to add a criteria to a query and explain the method ?

30. What are the different bean scopes in spring ?

31. What are the advantages of spring framework ?

(6 × 4 = 24 marks)

Part D

Answer any **two** *questions, not exceeding* **four pages**.
Each question carries 15 marks.

32. Explain the purpose of the following functions :

    (a) getRemoteAddr().   (b) getRemoteHost().

    (c) getRemoteUser().   (d) getServletPath().

Or

33. Explain with example, the conditional statements and loop statements in JSP.

34. Explain JDBC driver and driver management in detail.

Or

35. What are the three states of a Hibernate Persistence object ? Explain each state with necessary details.

(2 × 15 = 30 marks)