

FIFTH SEMESTER B.VOC. DEGREE EXAMINATION, NOVEMBER 2018

Software Development

SDC 5IT 18 (E2)—J2EE

Time : Three Hours

Maximum : 80 Marks

Part A*Answer all questions.*

1. What do you mean by multi-tiered architecture ?
2. What is `javax.servlet.Servlet` ?
 - (a) Interface.
 - (b) Abstract class.
 - (c) Concrete class.
 - (d) None of the above.
3. Which of the following code is used to get a HTTP session object in servlets ?
 - (a) `Request.getSession()`.
 - (b) `Response.getSession()`.
 - (c) `New Session()`.
 - (d) None of the above.
4. Which of the following is true about `destroy()` method of servlet ?
 - (a) After the `destroy()` is called, the servlet object is marked for garbage collection.
 - (b) The servlet is terminated by calling `destroy()` method.
 - (c) Both of the above.
 - (d) None of the above.
5. Page Context is an instance of _____ class.
 - (a) `javax.servlet.ServletContext`.
 - (b) `javax.servlet.ServletConfig`.
 - (c) `javax.servlet.jsp.PageContext`.
 - (d) `javax.servlet.Application`.
6. Which of the following is not an implicit object ?
 - (a) Request.
 - (b) Response.
 - (c) Cookie.
 - (d) Session.
7. What JDBC stands for ?
 - (a) Java Database Connectivity.
 - (b) Java Driver for Basic Connection.
 - (c) Joint Database Connectivity.
 - (d) Joint Driver for Basic Connection.

Turn over

8. _____ manages a list of database drivers in JDBC.
- (a) Driver manager. (b) JDBC driver.
(c) Connection. (d) Statement.
9. What is first level cache in hibernate ?
- (a) It is the Session based cache.
(b) It is the Session Factory based cache.
(c) Both of the above.
(d) None of the above.
10. What is Dependency Injection ?
- (a) It is a design pattern which implements Inversion of control for software applications.
(b) It is one of the spring modules.
(c) It is a technique to get dependencies of any project.
(d) It is used to promote tight coupling in code.

(10 × 1 = 10 marks)

Part B

*Answer any **eight** questions, not exceeding a paragraph of 50 words.*

11. What is presentation tier ?
12. When service() method of servlet called ?
13. How sendErrorQ method works in servlet ?
14. When init() method of servlet called ?
15. What are the advantages of using JSP ?
16. How JSP is used in the MYC model ?
17. What is taglib directive ?
18. How can you view a result set ?
19. What are SQL warnings ?
20. Which method is used to create an SQL query ?
21. What is the purpose of Session.beginTransaction() method ?
22. What is a Dispatcher Servlet ?

(8 × 2 = 16 marks)

Part C

Answer any six questions, in a page of 250 words.

23. Explain MVC architecture.
24. What are various types of J2EE modules ?
25. Explain getContextPath() function and its usage.
26. What are cookies and how cookies work ?
27. Briefly explain about JSP directives.
28. What is the difference between JspWriter and PrintWriter ?
29. Explain about JDBC-ODBC bridge driver.
30. What are the advantages of Hibernate framework ?
31. What are the types of IoC containers ? Explain.

(6 × 4 = 24 marks)

Part D

Answer any two questions, not exceeding four pages.

32. Explain about servlet and lifecycle of servlet.

Or

33. Explain JSP session management.
34. Explain hibernate mapping in detail.

Or

35. Explain in detail, the common implementations of Application Context.

(2 × 15 = 30 marks)