

Roll No.

BCA–E-504

B. C. A. (Fifth Semester) EXAMINATION, 2020-21

ADVANCE JAVA

Time : 2:30 Hours

Maximum Marks : 60

Note : All questions have to be attempted.

Section—A

1. Multiple choice type questions : 1 each

(i) Struts is a (CO3)

- (a) Technology
- (b) Frameworks
- (c) Java Development Tool Kit
- (d) Language

(ii) Which method is necessary for Action Class ? (CO3)

- (a) valuator()
- (b) reset()
- (c) findForward()
- (d) execute()

(iii) page directive should be used in JSP to generate a PDF page. (CO2)

- (a) contentType
- (b) generatePdf
- (c) typePDF
- (d) contentPDF

(iv) Spring is developed by (CO5)

- (a) Red Hat Software
- (b) Daniel Fernández
- (c) Pivotal Software
- (d) Apache

(v) is not a core interface of Hibernate ? (CO3)

- (a) Configuration
- (b) Criteria
- (c) SessionManagement
- (d) Session

(vi) Abbreviate the term POJO : (CO3)

- (a) Performance Old Java Object
- (b) Plain Old Java Object
- (c) Performance Optimize Java Object
- (d) None of the above

- (vii) is not core interface of hibernate. (CO4)
- (a) Configuration
 - (b) Criteria
 - (c) Session Management
 - (d) Session
- (viii) Technique do we mix our business logic with the presentation logic : (CO2)
- (a) JSP
 - (b) Servlet
 - (c) Both (a) and (b)
 - (d) None of the above
- (ix) How many web.xml you can use file for an application ? (CO1)
- (a) w
 - (b) 1
 - (c) 3
 - (d) 4
- (x) Examples of Application Server are : (CO1)
- (a) Weblogic
 - (b) Tomcat
 - (c) JBoss
 - (d) (a) and (c)

- (xi) How many techniques are used in Session Tracking ? (CO1)
- (a) 2
 - (b) 3
 - (c) 4
 - (d) 5
- (xii) Select the correct full form of HQL : (CO4)
- (a) Hibernate Queue Language
 - (b) Hibernate Query Language
 - (c) Hipher Query Language
 - (d) None of the above
2. Attempt any *four* of the following : 3 each
- (a) Write advantages of struts. (CO3)
 - (b) Define first level cache and second level cache. (CO4)
 - (c) Differentiate CGI vs. Servlets. (CO1)
 - (d) Explain ORM and JPA. (CO4)
 - (e) Differentiate JSP vs. Servets. (CO2)

Section—B

3. Attempt any *two* of the following : 6 each
- (a) Discuss and implement various scripting elements supported by JSP. (CO2)
 - (b) Discuss the working of sentRedirect() forward() and include() method using diagram and implement a program for the same. (CO1)

- (c) Discuss the importance of Java bean. Implement a program using Java bean. (CO2)
- 4. Attempt any *two* of the following : 6 each
 - (a) Discuss the working of Struts 2 Basic Flow and Standard flow using diagrams. (CO5)
 - (b) Discuss the life cycle of Servlets with the help of suitable example. Implement a program to read the values from HTML text fields. (CO1)
 - (c) Discuss the importance of Cookies in Servlets. Implement a program using cookies to manage the user session. (CO1)
- 5. Attempt any *two* of the following : 6 each
 - (a) Why we use Hibernate framework over JDBC ? Explain various advantages of hibernate. Discuss the Hibernate architecture using a suitable diagram. (CO4)
 - (b) Discuss the concept of Exception handling in JSP and implement a program for the same in JSP. (CO2)
 - (c) Discuss various features of spring framework in detail. Explain the spring modules and AOP concept in spring using diagrams. (CO5)