

Roll No.

BCA–E-504

B. C. A. (Fifth Semester) EXAMINATION, 2019

ADVANCE JAVA

Time : 2:30 Hours

Maximum Marks : 60

Note : Attempt all questions.

Section—A

1. Choose the correct answer : 1 each
- (a) Name any *three* framework of java.
 - (b) JPA stands for _____.
 - (c) What is Servlet API ?
 - (d) What is Web Application ?
 - (e) What of the following method is used inside session only ?
 - (i) merge()
 - (ii) update()
 - (iii) end()
 - (iv) kill()

- (f) The term POJO :
 - (i) Plain Old Java Object
 - (ii) Performance Old Java Object
 - (iii) Performance Optimize Java Object
 - (iv) None of the above
- (g) Which object of HttpSession can be used to view and manipulate information about a session ?
 - (i) session identifier
 - (ii) creation time
 - (iii) last accessed time
 - (iv) All of the above
- (h) Need of Web.xml.
- (i) Name any *two* Servers.
- (j) Server is hardware and software as well.
 - (i) True
 - (ii) False
- (k) Struts is a powerful framework to develop MVC applications.
 - (i) True
 - (ii) False
- (l) Why do we use index.jsp ?

2. Write short notes on any *four* of the following : 3 each
- (a) Servlet Filter

- (b) Types of Comment in ISP and types of errors.
- (c) Discuss advantages and limitation of Cookies.
- (d) Write a program to count hit counter in Servlet.
- (e) Difference between HTTP Servlet and Generic Servlet.

Section—B

3. Attempt any *two* of the following questions : 6 each
- (a) Explain the life cycle of Servlet Write a program to print welcome message on web browser on button click.
 - (b) Consider the following database table; design an HTML page and JSP to store its data in a database :

```
CREATE TABLE "USER432"
{
  "NAME" VARCHAR2(40),
  "EMAIL" VARCHAR2(40),
  "PASS" VARCHAR2(40)
}
```
 - (c) Discuss the `sendRedirect()` and `Forward()` methods with examples.
4. Attempt any *two* of the following questions : 6 each
- (a) Explain various session management techniques. Write a program using Hidden field in Servlet.
 - (b) Discuss various modules of Spring Framework with suitable diagram.

- (c) What is JSP ? Discuss its merits over Servlet. Compare Servlet and JSP life cycle.
5. Attempt any *two* of the following questions : 6 each
- (a) Discuss the Hibernate Architecture in detail with suitable diagrams.
 - (b) Discuss the importance of JSP. Write a JSP program to fetch the data from the database.
 - (c) What is Struts ? Why do we use it ? Discuss the salient features of Struts2 Framework.