

Roll No.

BCA–E-506

Bachelor of Computer Applications (Fifth Semester)

EXAMINATION, 2022-23

ADVANCE JAVA

Time : $2\frac{1}{2}$ Hours

Maximum Marks : 60

Note : All questions have to attempted.

Section—A

1. Multiple Choice questions : 1 each

(a) A cookies consists of the : (CO1, BL-1)

(i) Name

(ii) Value of Cookie

(iii) Domain

(iv) All of the above

P. T. O.

- (b) Which of the following coded is used to get an attribute in a HTTP session object in servlets ?

(CO1, BL-3)

- (i) session.getAttribute (String name)
 - (ii) session.alterAttribute (String name)
 - (iii) session.updateAttribute (String name)
 - (iv) Session.setAttribute (String name)
- (c) Which page directive should be used in JSP to generate a PDF page ? (CO2, BL-1)

- (i) contentType
 - (ii) generatePdf
 - (iii) typePDF
 - (iv) contentPDf
- (d) Which of the following action variables is used to include a file in JSP ? (CO2, BL-3)

- (i) JSP.setProperty
- (ii) JSP.getProperty
- (iii) JSP.include
- (iv) JSP.plugin

- (e) Which object stores references to the request and response objects ? (CO2, BL-3)
- (i) SessionContext
 - (ii) PageContext
 - (iii) HttpSession
 - (iv) SessionAttribute
- (f) Which attribute uniquely identification element ? (CO3, BL-1)
- (i) ID
 - (ii) Class
 - (iii) Name
 - (iv) Scope
- (g) What is spring ? (CO5, BL-4)
- (i) Spring is an open source development framework for enterprise Java
 - (ii) Spring is a proprietary framework
 - (iii) Spring is a development framework for .Net
 - (iv) Spring is development framework for PHP
- (h) Struts combines which of these in to a unified framework ? (CO2, BL-3)
- (i) Java Servlets

- (ii) JSP
 - (iii) Custom tage
 - (iv) All mentioned above
- (i) Abbreviate the term OGNL : (CO4, BL-1)
- (i) Object-Goal Navigation Language
 - (ii) Object-Graph Navigation Language
 - (iii) Oriented-Graph Navigation Language
 - (iv) None of the above
- (j) What is responsible in MVC for Managing the data of the application which responds to the request from the view as well as to the instructions from the controller to update itself ?
- (CO2, BL-3)
- (i) View
 - (ii) Model
 - (iii) Controller
 - (iv) None of the above
- (k) Examples of application server is : (CO1, BL-1)
- (i) Apache Tomcat
 - (ii) Net Beans
 - (iii) API
 - (iv) None of the above

- (l) Struts is a (CO4, BL-1)
- (i) Java Developments tool kit
 - (ii) Language
 - (iii) Frameworks
 - (iv) Technology
2. Attempt any *four* of the following : 3 each
- (a) Difference between CGI and servlet. (CO1, BL-4)
 - (b) Write advantages of struts. (CO4, BL-5)
 - (c) Write short notes on servlet context and servletconfig. (CO1, BL-5)
 - (d) Difference between MVC in JSP and MVC in spring. (CO2, BL-4)
 - (e) Differentiate JSP vs. Servlets. (CO2, BL-4)

Section—B

3. Attempt any *two* of the following : 6 each
- (a) Explain various session management techniques.
Write a program using hidden field in servlet.
(CO1, BL-3)
 - (b) What is JSP ? Discuss its merits over servlet.
Compare the servlet and JSP life cycle.
(CO2, BL-3)

- (c) Discuss and implement various scripting elements supported by JSP. (CO2, BL-6)
4. Attempt any *two* of the following : 6 each
- (a) Discuss various features of spring framework in detail. Explain the spring modules and MVC in spring using diagram. (CO4, BL-2)
- (b) Differentiate model 1 v/s model 2 struts 2 features using diagram. (CO4, BL-4)
- (c) Write steps to create a servlet in Tomcat. How is servlet working ? (CO1, BL-6)
5. Attempt any *two* of the following : 6 each
- (a) What is JavaFX ? Architecture of JavaFX. Discuss the JavaFX program structure using FXML. (CO3, BL-5)
- (b) Discuss JavaFX controls and layouts using diagram. (CO3, BL-2)
- (c) What is spring ? Why do we need it ? Discuss the spring JPBC. (CO5, BL-2)