

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2022
(Fourth Semester)

Branch – COMPUTER TECHNOLOGY

ADVANCED JAVA PROGRAMMING

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10 x 1 = 10)

1. _____ is a small client application written in the Java programming language that executes in the Java virtual machine installed in the web browser
(i) Client Program (ii) Applet Program
(iii) Application Program (iv) Browser Program
2. Which of the following container manages the execution of JSP page and servlet components for J2EE applications?
(i) J2EE server (ii) Enterprise JavaBeans (EJB) container
(iii) Web container (iv) Application client container
3. Which method is used to retrieve multiple results?
(i) Execute () (ii) Execute Query()
(iii) Result Set() (iv) None of the above
4. _____ object is used to call a stored procedure from within a J2EE object
(i) ResultSet (ii) Prepared Statement
(iii) Callable Statement (iv) Statement
5. To transfer control to another web component, you invoke the forward method of a RequestDispatcher.
(i) Include (ii) Request
(iii) Post (iv) Forward
6. _____ method should not release any shared resources until all the service requests have completed.
(i) Delete (ii) Destroy
(iii) Clean (iv) Replace
7. _____ are passed as parameters to calls to the JSP expression evaluator
(i) Expression language expressions (ii) Directives
(iii) Scripting Element (iv) Custom Tags
8. JSP page execution parameters by using _____
(i) Scripting Element (ii) Page directives
(iii) Custom Tags (iv) None of the above
9. A _____ represents a transient conversation with a client.
(i) Message-Driven Bean (ii) Entity Bean
(iii) Session Bean (iv) Java Bean

Cont...

- 10 Which of the following bean has been used if the application should be scalable?
- | | |
|-------------------------|------------------|
| (i) Message-Driven Bean | (ii) Entity Bean |
| (iii) Session Bean | (iv) Java Bean |

SECTION - B (25 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 5 = 25)

- 11 a) Describe the Web services support for J2EE application.
(OR)
b) Explain the role of tool provider in J2EE application development.
- 12 a) Explain the JDBC Driver Types.
(OR)
b) Describe about Prepared Statement and Callable Statement.
- 13 a) How to access web context.
(OR)
b) Describe the methods supported for finalizing servlet.
- 14 a) How to create a dynamic content using JSP.
(OR)
b) Describe how to use XML namespaces to declare tag libraries.
- 15 a) Explain the two types of session beans.
(OR)
b) What Makes Entity Beans Different from Session Beans?

SECTION -C (40 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 8 = 40)

- 16 a) Explain J2EE API's
(OR)
b) Illustrate the components of Java server faces.
- 17 a) Describe the concept of JDBC.
(OR)
b) Explain the various types of statement objects used to execute the query.
- 18 a) Describe how to get information from requests and generate responses.
(OR)
b) Explain the mechanisms provided by Java servlet technology API's for managing and implementing sessions.
- 19 a) Explain the following
i) Declaring and accessing variables in JSP
ii) Implicit objects related to JSP
iii) Defining function in JSP
(OR)
b) Explain the procedure for declaring and including custom tag libraries in JSP.
- 20 a) Summarize various types of beans.
(OR)
b) Explain Entity beans.