



BRAINWARE UNIVERSITY

Term End Examination 2023

Programme – MCA-2022

Course Name – Core Java and Advanced Java

Course Code - MCA201

(Semester II)

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 15=15

1. *Choose the correct alternative from the following :*

- (i) Identify the programming style of the object-oriented conceptual model?
- | | |
|----------------------------|--|
| a) Invariant relationships | b) Algorithms |
| c) Classes and objects | d) Goals, are often expressed in predicate calculus. |
- (ii) Identify What is Truncation is Java?
- | | |
|--|--|
| a) Floating-point value assigned to an integer type | b) Integer value assigned to floating type |
| c) Floating-point value assigned to an Floating type | d) Integer value assigned to floating typ |
- (iii) The EJB specification architecture does NOT define-choose the correct answer
- | | |
|----------------------------------|--|
| a) transactional components | b) client side security and encryption |
| c) distributed object components | d) server-side components |
- (iv) Which of these keywords must be used to handle the exception thrown by try block in some rational manner?
- | | |
|----------|------------|
| a) try | b) finally |
| c) throw | d) catch |
- (v) Abstraction is classified into _____ types-Choose the correct answer
- | | |
|------|------|
| a) 4 | b) 3 |
| c) 2 | d) 1 |
- (vi) The process of compartmentalizing the elements of an abstraction that constitute its structure and behavior is called as-Choose the correct answer
- | | |
|---------------|-----------------------|
| a) Hierarchy | b) Encapsulation |
| c) Modularity | d) Entity Abstraction |

- (vii) Select the following mechanisms, types of all variables and expressions are fixed at compilation time
- a) Strong Typing
 - b) Weak Typing
 - c) Static Binding / early binding
 - d) Dynamic Binding / late binding
- (viii) Select the following mechanisms, types of all variables and expressions are not known until runtime
- a) Strong Typing
 - b) Weak Typing
 - c) Static Binding / early binding
 - d) Dynamic Binding / late binding
- (ix) Object oriented technology is built upon a sound engineering foundation, whose elements are collectively called as _____
- a) Von Neumann Model
 - b) Object Model
 - c) Structured Model
 - d) Programming Model
- (x) Callback is an operation provided by _____ -Choose the correct answer
- a) Inheritance
 - b) Encapsulation
 - c) Modularity
 - d) Abstraction
- (xi) Analyze What is the lifecycle of a servlet?
- a) Servlet class is loaded
 - b) Servlet instance is created
 - c) init,Service,destroy method is invoked
 - d) All mentioned above
- (xii) Analyze Which HTTP Request method is non-idempotent?
- a) GET
 - b) POST
 - c) BOTH A & B
 - d) None of the above
- (xiii) Analyze Which class can handle any type of request so that it is protocol-independent?
- a) GenericServlet
 - b) HttpServlet
 - c) Both A & B
 - d) None of the above
- (xiv) Which server-side component is required to be deployed on the server?
- a) EJB
 - b) RMIC
 - c) Both A & B
 - d) None of the above
- (xv) Identify the private member functions access scope?
- a) Member functions which can only be used within the class
 - b) Member functions which can used outside the class
 - c) Member functions which are accessible in derived class
 - d) Member functions which can't be accessed inside the class

Group-B

(Short Answer Type Questions)

3 x 5=15

2. Explain the Constructor Chaining? What is the use of it? (3)
3. Describe the main steps involved in the JSP life cycle (3)
4. What do you understand by message passing? Explain with an example. (3)
5. Explain the advantages of a Rowset. (3)
6. Discuss What is the difference between class and interface in Java? (3)

OR

Discuss What is Abstract class in Java? How to define it? (3)

Group-C

(Long Answer Type Questions)

5 x 6=30

7. What do you mean by Garbage Collection? (5)

- 8. Describe the characteristics of Object Oriented Programming. (5)
- 9. Define What is DriverManager in JDBC? (5)
- 10. difference between throw and throws in java- Discuss with an example. (5)
- 11. Define Generic in Java with an example. (5)
- 12. Write down the difference between throw and throws keyword in java (5)

OR

Differentiate between Thread and Process. (5)
