

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

End Semester Examination – Winter 2018

Course: B. Tech in Information Technology

Sem: III

Subject Name: Programming in Java

Subject Code: BTITE305B

Max Marks:60

Date: 10-12-2018

Duration: 3

Hr.

**Instructions to the Students:**

1. Solve **ANY FIVE** questions out of the following.
2. The level question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in ( ) in front of the question.
3. Use of non-programmable scientific calculators is allowed.
4. Assume suitable data wherever necessary and mention it clearly.

	(Level/CO)	Marks
Q. 1 Solve the following.		
A) Write any two methods of array list class with their syntax.	Application	04
B) Why java became platform independent language? Explain.	Analysis	04
C) State & explain scope of variable with an example.	Remember	04
Q.2 Solve the following.		
A) Explain inheritance and polymorphism features of Java.	Comprehension	04
Explain how interface is used to achieve multiple Inheritance in Java.	Application	04
B)		
C) Define a class and object. Write syntax to create class and object with an example.	Remember	04
Q. 3 Solve the following.		
A) Define applet. Write a program to create an applet to display message "Welcome to java applet".	Remember	04
	Application	
B) Which are the ways to access package from another package? Explain with example.	Comprehension	04
C) Explain applet life cycle with suitable diagram.	Comprehension	04
Q.4 Solve the following.		
A) Write a program to create two thread one to print odd number only and other to print even numbers.	Application	04
B) With proper syntax and example explain following thread methods: (1) wait( ) (2) sleep( ) (3) resume( ) (4) notify( )	Remember	04
	Comprehension	
C) With syntax and example explain try & catch statement.	Comprehension	04

Q. 5 Solve the following.

- A) Give the syntax of following methods of graphics class. Explain their use with suitable program: Comprehension 08
- (i) drawRoundRect( ) (ii) drawPolygon( ) (iii) drawOval( ) (iv) drawString( )
- B) Write a applet program to set background with red colour and foreground with blue colour. Application 04

Q.6 Solve the following.

- A) Write a java program to copy the content of the file "file1.txt" into new file "file2.txt". Application 08
- B) Explain byte stream class in detail. Comprehension 04

\*\*\* End \*\*\*

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL  
UNIVERSITY, LONERE – RAIGAD -402 103  
Semester Examination – Summer - 2019**

**Branch: Computer Science & Engineering**

**Sem.: -IV**

**Subject with Subject Code:- OOP in Java (BTCOE404A)**

**Marks:60**

**Date:-22/05/19**

**Time:- 3 Hr.**

**Instructions to the Students**

1. Each Question carries 12 marks.
2. Attempt **any Five** Questions of the following.
3. Illustrate your answers with neat sketches, diagram etc., wherever necessary.
4. If some part or parameter is noticed to be missing, you may appropriately assume it and should mention it clearly.

**Q.1. All Questions are Compulsory:**

**(04\*03=12)**

- a) Differentiate between OOP and POP.
- b) Write a program to find largest number using multiple if statements.
- c) List different operators in JAVA and explain any two of them.

**Q.2. Attempt any two Questions:**

**(06\*02=12)**

- a) Which are the members of a class? Explain their role in class definition. Explain with suitable example.
- b) Create class Account to provide a method called debit that withdraws money from an Account. Ensure that the debit amount does not exceed the Account's balance. If it does, then the balance should be left unchanged and the method should print a message indicating "Debit amount exceeded account balance." Modify class AccountTest to test method debit.
- c) What is a default constructor? How are an object's instance variables initialized if a class has only a default constructor? Explain with example.

**Q.3. Attempt any two Questions:**

**(06\*02=12)**

- a) Explain counter-controlled repetition and sentinel-controlled repetition.
- b) Explain break and continue statements with example.
- c) List the selection structure statements and explain any one of them with example.

**Q.4.Attempt any two Questions:**

**(06\*02=12)**

- a) How to declare and create array in JAVA? How to pass an array to method?  
Explain with example.
- b) Write statements that perform the following one-dimensional-array operations:
  - i) Set the 10 elements of integer array counts to zero.
  - ii) Add one to each of the 15 elements of integer array bonus.
  - iii) Display the five values of integer array best Scores in column format.
- c) Write program in java, create two dimension array to store grades of 7 subjects of 10 students of a batch. Find the lowest, highest and average grade of batch.

**Q.5.Attempt any two Questions:**

**(06\*02=12)**

- a) List and explain different methods of class Arrays. Also show a simple example program on it.
- b) Explain the use of overloaded constructors with example.
- c) Write a program to find multiplication of two matrices.

**Q.6.All Questions are Compulsory:**

**(04\*03=12)**

- a) What is inheritance? What is its necessity? Explain with example.
  - b) What is the concept of polymorphism? Explain its need in OOP.  
Explain with example.
  - c) Explain relationship between Superclasses and Subclasses with example.
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File-1

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY,**  
**LONERE – RAIGAD - 402 103**  
**Supplementary Examination Winter Dec-2019**

**Branch: B. Tech. In Computer Engineering**  
**Subject: Object Oriented Programming in Java (BTCOE404A)**  
**Date: 02/12/2019**

**Sem.:- IV**  
**Marks: 60**  
**Time: 3 Hours.**

**Instructions to the Students**

1. Each question carries 12 marks.
2. Attempt **any five** questions of the following.
3. Illustrate your answers with neat sketches, diagram etc., wherever necessary.
4. If some part or parameter is noticed to be missing, you may appropriately assume it and should mention it clearly .

Q. No		(Marks)
Q.1.A]	How Java differs from C and C++?	(6M)
Q.1.B]	Explain the general structure of the Java Program.	(6M)
Q.2.A]	What is readLine( ). Write a simple Java Program which reads an integer, character and float value from the keyboard.	(6M)
Q.2.B]	What is a class? What is an object? How does class is declared? How instance of a class is generated?	(6M)
Q.3.A]	What are switch statements? Write a simple Java Program which performs Arithmetic Operations using switch statement.	(6M)
Q.3.B]	Explain: a) Conditional operators. b) Logical Operators. c) Bitwise Operators.	(6M)
Q.4.A]	How arrays are declared and created in computer memory? Write a simple Java program performing [2 X 2] matrix addition.	(6M)
Q.4.B]	Write a Java Program to perform [3 X 3] Matrix Multiplication.	(6M)
Q.5.A]	What are constructors? What are methods? How methods are declared in Java.	(6M)
Q.5.B]	Explain the Get and Set Methods using a Java Program.	(6M)
Q.6.A]	Explain the different types of inheritance implemented in Java.	(6M)
Q.6.B]	Write a short note on: a) Polymorphism. b) Strings. c) Packages.	(6M)

\*\*\*\*\*END OF QUESTION PAPER\*\*\*\*\*

<b>DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE</b> <b>Winter Examination – 2022</b> <b>Course: B. Tech.    Branch :Computer Science &amp; Engineering                      Semester :III</b> <b>Subject Code &amp; Name: BTCOC305(B) Object Oriented Programming in Java</b> <b>Max Marks: 60                                              Date:                                              Duration: 3 Hr.</b>			
<b>Instructions to the Students:</b> 1. All the questions are compulsory. 2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in ( ) in front of the question. 3. Write proper Syntax, example and program wherever necessary. 4. Assume suitable data wherever necessary and mention it clearly.			
		(Level/CO)	Marks
<b>Q. 1</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
<b>A)</b>	Define Class, Method and Object? Show the syntax to define these in java.	<b>Remember</b>	<b>6</b>
<b>B)</b>	Explain parameterized constructor with java program.	<b>Apply</b>	<b>6</b>
<b>C)</b>	What are get () and set () method in java? State advantages of get () and set () method.	<b>Understanding</b>	<b>6</b>
<b>Q.2</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
<b>A)</b>	Write a program in Java to display n terms of natural numbers and their sum.	<b>Apply</b>	<b>6</b>
<b>B)</b>	What is static variable and static function? State difference between static method and instance method.	<b>Understanding</b>	<b>6</b>
<b>C)</b>	Explain method overloading using java program.	<b>Apply</b>	<b>6</b>
<b>Q. 3</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
<b>A)</b>	What is an Array? How do you declare and initialize an Array in java? What are the disadvantages of Array?	<b>Analysis</b>	<b>6</b>
<b>B)</b>	How to pass Arrays to method and return from method in Java?	<b>Understanding</b>	<b>6</b>
<b>C)</b>	What is a Multidimensional array? Write a java program for addition of two dimensional arrays.	<b>Apply</b>	<b>6</b>
<b>Q.4</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
<b>A)</b>	Describe the uses of super keywords with respect to inheritance.	<b>Remember</b>	<b>6</b>
<b>B)</b>	Explain concept of multilevel inheritance using a simple java program.	<b>Apply</b>	<b>6</b>
<b>C)</b>	What is an abstract class in java? What is an interface? List the rules to create an interface in java with example.	<b>Understanding</b>	<b>6</b>

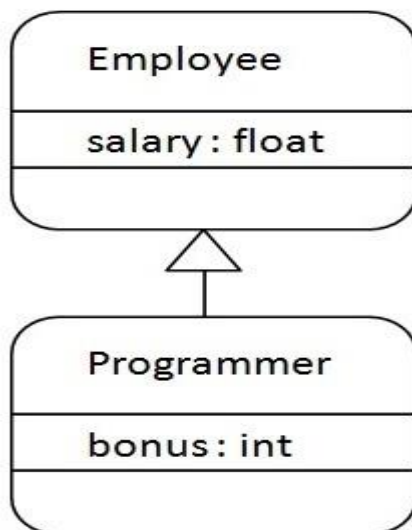
<b>Q. 5</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
<b>A)</b>	What is exceptions handling and state benefits of exception handling in java? Explain Java Exception Handling Keywords.	<b>Remember</b>	<b>6</b>
<b>B)</b>	What is package? Write a program to create user defined package in java.	<b>Analysis</b>	<b>6</b>
<b>C)</b>	How to declare variables in JavaScript? Write a Java script Program to add two numbers by using on click event, form and text box.	<b>Understanding</b>	<b>6</b>
	<b>*** End ***</b>		

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**Instructions to the Students:**

1. All the questions are compulsory.
2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in ( ) in front of the question.
3. Use of non-programmable scientific calculators is allowed.
4. Assume suitable data wherever necessary and mention it clearly.

	(Level/CO)	Marks
<b>Q. 1 Solve Any Two of the following.</b>		<b>12</b>
A) Explain features of JAVA.	L1/CO1	6
B) With neat diagram explain working of Java Virtual Machine.	L2/CO1	6
C) Differentiate between C and JAVA	L2/CO1	6
<b>Q.2 Solve Any Two of the following.</b>		<b>12</b>
A) What is class? What is object? How does class is declared? How instance of class is generated.	L3/CO2	6
B) What is package? Explain how to create user defined package in java with example	L2/CO2	6
C) Write a program to illustrate inheritance.	L3/CO2	6



<b>Q. 3 Solve Any Two of the following.</b>		<b>12</b>
A) With a neat sketch draw a lifecycle of thread.	L2/CO3	6
B) Explain types of Exceptions.	L2/CO3	6
C) Write a Program to illustrate try & Catch Clauses in Java.	L3/CO3	6



<b>Q.4 Solve Any Two of the following.</b>		<b>12</b>
A) Differentiate between TCP/IP & UDP.	<b>L2/CO2</b>	<b>6</b>
B) Explain Read () & Write () methods of file.	<b>L2/CO1</b>	<b>6</b>
C) Enlist different types of JDBC drivers. Explain any two.	<b>L2/CO4</b>	<b>6</b>
 <b>Q. 5 Solve Any Two of the following.</b>		 <b>12</b>
A) What is event Delegation model? Explain.	<b>L2/CO5</b>	<b>6</b>
B) Write a applet program to display message “Hello World”.	<b>L3/CO5</b>	<b>6</b>
C) What is the use of graphics class? Enlist and explain different methods and its use provided in graphics class.	<b>L2/CO5</b>	<b>6</b>

**\*\*\* End \*\*\***

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE****Supplementary Summer - 2023****Course: B. Tech. Branch : Computer Science Engineering and Allied Second Year Semester :III****Subject Code & Name:BTCOC305B & (Elective) Object Oriented Programming in Java****Max Marks: 60****Date:21/08/2023****Duration: 3.00 Hr.**

	<b><i>Instructions to the Students:</i></b> 1. All the questions are compulsory. 2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in ( ) in front of the question. 3. Use of non-programmable scientific calculators is allowed. 4. Assume suitable data wherever necessary and mention it clearly.		
		(Level/CO)	Marks
<b>Q. 1</b>	<b>Solve Any Two of the following.</b>		
<b>A)</b>	Write a Java Program to Check Whether a Number is Even or Odd	(Application)	<b>6</b>
<b>B)</b>	What are the advantages of the object-oriented programming language?	(Understand)	<b>6</b>
<b>C)</b>	List the primitive data types available in Java and explain.	(Understand)	<b>6</b>
<b>Q.2</b>	<b>Solve Any Two of the following.</b>		
<b>A)</b>	What are the benefits of break and continue statements explain with example?	(Analysis)	<b>6</b>
<b>B)</b>	Discuss default constructor and parameterized constructor with the help of an example in Java?	(Application)	<b>6</b>
<b>C)</b>	Difference between method overloading and method overriding	(Understand)	<b>6</b>
<b>Q. 3</b>	<b>Solve Any Two of the following.</b>		
<b>A)</b>	Write a program to sort the given input array in ascending and descending order? For example : <b>Input:</b> arr[]={ 13,41,2,21,9,25,3 }	(Application))	<b>6</b>
<b>B)</b>	Write a program to check whether enter number is palindrome or not?	(Application)	<b>6</b>
<b>C)</b>	Write the differences between interface and abstract class	(Understand)	<b>6</b>
<b>Q.4</b>	<b>Solve Any Two of the following.</b>		
<b>A)</b>	Define inheritance. What are the benefits of inheritance? How to prevent a class from inheritance?	(Understand)	<b>6</b>
<b>B)</b>	Explain different types of inheritance with diagram.	(Understand)	<b>6</b>
<b>C)</b>	Define polymorphism. Explain run time polymorphism with the help of example.	(Application)	<b>6</b>
<b>Q. 5</b>	<b>Solve Any two of the following.</b>		
<b>A)</b>	What is the difference between error and an exception? Explain with help of example	(Understand)	<b>6</b>
<b>B)</b>	Write the difference between Final, finally and finalize.	(Application)	<b>6</b>

C)	Explain try, catch and finally block with the help of example	(Application)	6
	*** End ***		

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<b>DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE</b> <b>Supplementary Examination – Summer 2022</b> <b>Course:</b> B. Tech. in Computer Science and Engineering <b>Branch :</b> Computer Science and Engineering <b>Semester :III</b> <b>Subject Name:</b> Object Oriented Programming in Java <b>Subject Code:</b> BTCOC305-B <b>Max Marks: 60</b> <b>Date:</b> <b>Duration: 3 Hr.</b>			
<b>Instructions to the Students:</b> 1. All the questions are compulsory. 2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in ( ) in front of the question. 3. Use of non-programmable scientific calculators is allowed. 4. Assume suitable data wherever necessary and mention it clearly.			
		(Level/ CO)	Marks
<b>Q. 1</b>	<b>Solve Any Two of the following. (2X6)</b>		<b>12</b>
A)	What are the primitive data types in Java? Write about type conversions.	1	
B)	What is a nested class? Differentiate between static nested classes and non-static nested classes.	2	
C)	What is a constructor? What is its requirement in programming? Explain with program.	1	
<b>Q.2</b>	<b>Solve Any Two of the following. (2X6)</b>		<b>12</b>
A)	Write a program to implement the Fibonacci series using for loop control structure.	3	
B)	Explain the various non-access modifiers used in java.	2	
C)	How to define a package? How to access, import a package? Explain with examples.	2	
<b>Q. 3</b>	<b>Solve Any Two of the following. (2X6)</b>		<b>12</b>
A)	How to declare and create array in JAVA? How to pass an array to method?	2	
B)	What is variable length argument, explain with program.	1	
C)	Write a Java program to sort a numeric array in ascending order	3	
<b>Q.4</b>	<b>Solve Any Two of the following. (2X6)</b>		<b>12</b>
A)	What are the benefits of inheritance? Explain the various forms of inheritance with suitable code segments.	2	
B)	Describe the uses of final and super keywords with respect to inheritance.	2	
C)	Design an interface called Shape with methods draw() and getArea(). Further design two classes called Circle and Rectangle that implements Shape interface to compute area of respective shapes. Use appropriate getter and setter methods. Write a java program for the same.	3	

<b>Q. 5</b>	<b>Solve Any Two of the following. (2X6)</b>		<b>12</b>
<b>A)</b>	How to handle multiple catch blocks for a nested try block? Explain with an example	2	
<b>B)</b>	Write a java program to create own exception for Negative Value Exception if the user enter negative value.	3	
<b>C)</b>	Explain pattern matching. What is the different meta characters used in pattern matching?	2	
	<b>*** End ***</b>		

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**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE**

**Regular & Supplementary Winter Examination-2023**

**Course: B. Tech. Branch : Computer & Allied Engineering Semester :III**

**Subject Code & Name:BTCOC305B & (Elective) Object Oriented Programming in Java**

**Max Marks: 60**

**Date:11/01/2024**

**Duration: 3.00 Hr.**

***Instructions to the Students:***

- 1. All the questions are compulsory.*
- 2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in ( ) in front of the question.*
- 3. Use of non-programmable scientific calculators is allowed.*
- 4. Assume suitable data wherever necessary and mention it clearly.*

(Level/CO) Marks

**Q.1 Solve Any Two of the following.**

- |                                                                          |               |   |
|--------------------------------------------------------------------------|---------------|---|
| A) Explain different parts of a Java program with an appropriate example | (Application) | 6 |
| B) What are the advantages of the object-oriented programming language?  | (Understand)  | 6 |
| C) List the primitive data types available in Java and explain.          | (Understand)  | 6 |

**Q.2 Solve Any Two of the following.**

- |                                                                                                   |               |   |
|---------------------------------------------------------------------------------------------------|---------------|---|
| A) What are the benefits of break and continue statements explain with example?                   | (Analysis)    | 6 |
| B) Discuss default constructor and parameterized constructor with the help of an example in Java? | (Application) | 6 |
| C) How do we implement polymorphism in JAVA? Explain briefly                                      | (Understand)  | 6 |

**Q.3 Solve Any Two of the following.**

- |                                                                                                                                                                                           |                |   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---|
| A) a) Write a program to find the smallest and largest number from given input array?<br>For example : <b>Input:</b> arr[]={13,4,2,5,9}<br><b>Output :</b> Maximum is 13 and Minimum is 2 | (Application)) | 6 |
| B) Write a program to check whether enter number is palindrome or not?                                                                                                                    | (Application)  | 6 |
| C) Write the differences between interface and abstract class                                                                                                                             | (Understand)   | 6 |

**Q.4 Solve Any Two of the following.**

- |                                                                                                       |               |   |
|-------------------------------------------------------------------------------------------------------|---------------|---|
| A) Define inheritance. What are the benefits of inheritance? How to prevent a class from inheritance? | (Understand)  | 6 |
| B) Write a program to demonstrate hierarchical and multiple inheritance using interfaces              | (Understand)  | 6 |
| C) Define polymorphism. Explain run time polymorphism with the help of example.                       | (Application) | 6 |

**Q.5 Solve Any two of the following.**

- |                                                                                        |               |   |
|----------------------------------------------------------------------------------------|---------------|---|
| A) What is the difference between error and an exception? Explain with help of example | (Understand)  | 6 |
| B) How to create a user defined exception?                                             | (Application) | 6 |

- C) Write an html page and also provide a JavaScript for accepting a user ID (Application) 6  
and password from the user to ensure that the input is not empty  
\*\*\* End \*\*\*

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