

Reg No.: \_\_\_\_\_

Name: \_\_\_\_\_

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**  
EIGHTH SEMESTER B.TECH DEGREE EXAMINATION(S), OCTOBER 2019

**Course Code: CS486**

**Course Name: OBJECT ORIENTED PROGRAMMING**

Max. Marks: 100

Duration: 3 Hours

**PART A**

*Answer all questions, each carries 4 marks.*

	Marks
1 Differentiate between byte code and JVM?	(4)
2 Explain various methods involved in the lifecycle of an applet.	(4)
3 Explain the role of access specifiers in Java.	(4)
4 Discuss the concept of multiple catch and nested try statement.	(4)
5 What is JDBC-ODBC bridge driver?	(4)
6 What do you understand by interface? Discuss its implementation process.	(4)
7 Write a Java program to calculate the area of a circle using method overloading with 1) diameter 2) radius as parameters. Use necessary data types.	(4)
8 Write brief note on AWT event hierarchy.	(4)
9 Explain the use of the following functions in Java	(4)
1. join()	
2. notify()	
10 Write a Java program to find the sum of digits of the given number.	(4)

**PART B**

*Answer any two full questions, each carries 9 marks.*

- 11 a) What is the concept of memory allocation for objects? Discuss with suitable example. (6)
- b) What are the different types of inheritance supported by Java? (3)
- 12 Write a Java program to create a class Employee with empid, name, basic pay, DA as attributes and illustrate 1) default constructor 2) parameterized constructor 3) method to display the salary of an employee by calculating DA as 50 % of basic pay. (9)
- 13 Using control statements in Java, illustrate the following. (9)
- 1) Input: Roll No, Name, Marks of five subjects.
  - 2) Output: Grade of the student.
- Grade is calculated as follows:

- (i) Calculate the total marks percentage
- (ii) 90% or above - Grade A, above 80% and less than 90% - Grade B, above 70% and less than 80% - Grade C, less than 70% - Grade D

**PART C**

*Answer any two full questions, each carries 9 marks.*

- 14 a) Write the syntax to import and create a package. (4)
- b) Why abstract classes are required? Discuss class members of an abstract class with suitable example. (5)
- 15 a) What do you mean by character stream? Name any 3 classes in this stream and explain the purpose of each. (6)
- b) Explain the life cycle of a thread. (3)
- 16 a) What are the different types of Exceptions? (3)
- b) How user defined Exceptions are handled in Java? Illustrate. (6)

**PART D**

*Answer any two full questions, each carries 12 marks.*

- 17 a) How can different mouse events be handled? Demonstrate with an example. (12)
- 18 a) Write a program to accept rollno, name, CGPA of n students and store the data to a database using JDBC connectivity. Display the list of students having CGPA greater than 7. (12)
- 19 a) What are component and container in AWT? Explain with example? (7)
- b) Explain Layout manager. What component positions can be used with Border layout manager? (5)

\*\*\*\*