

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
FOURTH SEMESTER B.TECH DEGREE EXAMINATION, APRIL 2018

Course Code: CS206

Course Name: OBJECT ORIENTED DESIGN AND PROGRAMMING (CS)

Max. Marks: 100

Duration: 3 Hours

PART A

Answer all questions, each carries 3 marks

- | | | Marks |
|---|---|-------|
| 1 | Briefly explain the primitive data types used in Java. | (3) |
| 2 | Why Java is called pure object-oriented language? | (3) |
| 3 | Explain how access modifiers are used to control the visibility of identifiers. | (3) |
| 4 | Write a note on Java Virtual Machine. | (3) |

PART B

Answer any two full questions, each carries 9 marks

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|---|---|-----|
| 5 | a) Draw the Use case diagram of a movie reservation system. | (4) |
| | b) Write a program to check whether a string is palindrome or not. The input is to be accepted through command line parameter. | (5) |
| 6 | a) Describe the following statements in Java.:
i) <i>switch</i> and <i>for</i> ii) <i>break</i> and <i>continue</i> | (4) |
| | b) Define a Java class having overloaded methods to calculate area of rectangle and circle. | (5) |
| 7 | a) What is the use of constructor in Java? Give examples. | (4) |
| | b) Is it possible to create an object for class A using, A ob = new A(); if the class contains only parameterized constructor? Why? | (5) |

PART C

Answer all questions, each carries 3 marks

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| 8 | What is the use of interface in Java? Give example. | (3) |
| 9 | With the help of examples, explain how inheritance is implemented in Java. | (3) |
| 10 | Write a note on byte stream and character stream related classes. | (3) |
| 11 | Define package. How is a class within a package compiled and executed? | (3) |

PART D

Answer any two full questions, each carries 9 marks

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| 12 | a) Explain the different ways of creating threads in Java. | (4) |
| | b) Write a Java program that accepts N integers through console and compute their average. | (5) |
| 13 | Develop a java package named <i>primepackage</i> , with a class Prime containing a static method that check whether a number is prime or not and returns that information. Import this package in another class and use to check a number is prime or not. | (9) |

- 14 What is exception? List any four exception classes in Java. Briefly explain various exception handling keywords in Java, with examples. (9)

PART E

Answer any four full questions, each carries 10 marks

- 15 a) Explain event handling in Java. (5)
b) Compare swing and AWT in Java. (5)
- 16 a) List any five event sources and their corresponding event types and listeners used. (5)
b) What is applet? Describe the structure of applet. (5)
- 17 Develop an applet that allows to input velocity in Kilometers/Hour, convert and display in Meters/Second. Use AWT controls and event handling techniques. (10)
- 18 a) Explain the tag used to pass parameters to an applet. (3)
b) How do you establish connection between a java program and database? Explain the steps with sample code. (7)
- 19 a) Write an applet which displays the character when a key is typed. Use event handling mechanism. (7)
b) What is meant by dynamic query? (3)
- 20 Write a Java application program that simulates a simple dictionary. There exists a dictionary database and a table contain a set of English words and there meaning. The program accepts an English word from the user, look up in the database and retrieve the meaning, if available. The result is communicated back to the user. (10)
