

Reg. No. _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
SECOND SEMESTER MCA DEGREE EXAMINATION, AUG 2017

Course Code: **RLMCA102**

Course Name: **OBJECT ORIENTED PROGRAMMING**

Max. Marks: 60

Duration: 3 Hours

PART A

Answer all questions. Each question carries 3 marks.

1. What are instance variables? What is the effect of the keyword 'static' on them?
2. Distinguish between an object and a reference.
3. Define abstract method and abstract class. Give examples.
4. What is the use of 'protected' access specifier? Give sample Java code to illustrate.
5. What does * stand for in importing Packages? What is the drawback of using it?
6. Describe wait and notify methods.
7. Differentiate between Byte Stream and Character Stream
8. How do you create an object of InetAddress class?

PART B

Each question carries 6 marks.

9. Give an account of the following features of Java

i) Portable ii) Secure iii) Robust iv) Distributed

OR

10. Describe the terms Encapsulation, Polymorphism and Inheritance.

11. Explain with sample Java code, the effect of using the keyword 'final' with

i) A variable ii) A method iii) A class

OR

12. Write a Java program and its output that demonstrates Dynamic Method Dispatch.

13. What are the implicit access specifiers associated with the instance variables of an interface? Illustrate with sample Java code, the creation and implementation of an interface.

OR

14. Write a Java program for adding 2 Matrices and store the result in a third Matrix, using 2D Array. The Matrices have the same size, MxN.

15. With suitable Java Program(s), describe the following keywords used in Exception Handling

i) try ii) catch iii) throws iv) finally v) throw

OR

16. What is a thread? How is it different from a process? Explain the life cycle of a thread.

17. Describe the class RandomAccessFile. Write a Java program that demonstrates it. The program first writes the string "Hello World" at offset 25 in the file "myfile.txt". Then it reads 10 characters from offset 15 and displays it.

OR

18. What is Serialization? What are the requirements for it? Write a Java program to illustrate Serialization.

19. Explain the constructors and important methods of Datagram socket and Datagram packet classes.

OR

20. Explain the life cycle of an Applet. Write a Java program that outlines the basic methods used by an Applet.
