## **Dr. MPS Memorial College of Business Studies**

## **Question Bank**

## **BCA IV**

## **JAVA**

- 1) Explain History and Evolution of Java?
- 2) Demonstrate what are Jump statements? Give an example for each of them.
- 3) What is Byte Code? Interpret the different states of Java Program execution.
- **4)** Write a Java program to use Bit-wise operators.
- 5) What are the different components of JDK? Explain. Also describe the concept of JRE.
- 6) Explain the concepts JDK, JRE and JVM.
- 7) What is the purpose of the System class? Also explain the wrapper class in detail.
- 8) What classes of exceptions may be thrown by a throw statement?
- 9) Explain all Checked & Unchecked Exceptions.
- 10) What is interface & when do we use it?
- 11) List the Java Tokens and discuss in detail.
- 12) What is an Operator? Explain type of operators in Java with example programs.
- 13) Define Class, Method and Object? Show the syntax to define these in java.
- **14)** What is a Constructor? Explain types of Constructors in Java? Write a java program to find the Area of Circle using Constructor.
- **15)** Discuss about the static, final keywords with an example.
- **16)** Recall Inheritance? Illustrate the types of inheritances.
- **17)** Discuss about the super keyword in java with example.
- **18)** Compare Method Overriding and Method Overloading.
- 19) What is an abstract class? Explain all the cases to implement abstract Class.
- 20) Give the differences between Abstract class and Interface
- 21) Discuss in detail about Abstract Classes in Java.
- 22) Recall what is package? Explain how to create user defined package in java with example.
- 23) Write a java program to find the factorial value of the given number using user defined package concept.
- 24) What is a Java Exception and its types?
- **25)** Explain about try, catch, statements with examples.
- **26)** Demonstrate Nested try statements with an example.
- 27) List Java's Built-in Exception? Write the importance of finally block.
- 28) Explain Exception handling fundamentals.
- 29) Explain Java exception hierarchy.

- 30) Give the difference between checked and unchecked exceptions?
- **31)** Show the use of finally statements with examples.
- 32) What is Multithreading? What are the ways to create multiple threads in java?
- 33) Explain about Thread Life Cycle.
- **34)** Discuss how to set the priority to threads? What are the different ranges?
- 35) Write a java program to create two threads and execute simultaneously.
- **36)** What is synchronization? Give its types and explain.
- **37)** Write a java program to implement inter thread communication.
- 38) Define String? Explain different String declarations with an example.
- **39)** Write a java program to check the given string is palindrome or not.
- **40)** Write the difference between String and StringBuffer classes.
- 41) List and explain any five string methods.
- 42) Explain in detail about thread methods?
- 43) Write short notes on the following
  - a) this & super keyword
  - b) final & static keyword
  - c) nested & inner classes & their uses.
  - d) class & object.
- 44) Which of the following methods are defined in the Object class? Also give an example of the selected method.
  - a) toString()
  - b) equals(Object o)
  - c) wait()
  - d) all of the above
- 45) What is the purpose of the wait(), notify(), and notifyAll() methods?
- 46) What is mean by multi-threading? What are the 2 ways of creating a thread? Which is the best way and why?
- **47)** What do you understand by the term Applet? What is the life cycle of applet in java? Define the atleats ten methods of applet class with suitable examples.

Note: These questions are for your help only. For more and deep understanding of any topic, it is suggested to read books thoroughly.