

ST. ANN'S COLLEGE OF ENGINEERING & TECHNOLOGY: CHIRALA
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Subject: JAVA PROGRAMMING (R16)
Year & Sem/Section: II-II SEM 'A' & 'B' & 'C'

Academic Year: 2018-19

First 3 Units Assignment Questions (AOs)

Unit 1:

1. A) Discuss the principles of Object oriented languages in detail?
B) What is the role and responsibility of JVM in program execution?
2. List and Explain Java buzzwords. Which factors are making java famous language?
3. Compare the procedural language with object oriented language?
4. Briefly explain the following concepts. a) Abstraction b) Polymorphism
5. List and explain the principles of OOP.
6. Explain precedence rules and associativity concept.
7. What are the primitive data types in Java? Write about types conversions?
8. Discuss various control statements structures?
9. List and explain about the operators in java.
10. Explain about primitive type conversion and casting.

Unit 2:

1. Illustrate constructor overloading.
2. With program illustrate the use of command line arguments?
3. What is constructor? What is its requirement in programming? Explain with program?
4. How to create objects? Does Java support object destruction? Justify your answer.
5. Explain about method overloading with example program.
6. What do you mean by static class and static method? Can we make an instance of Abstract class? Justify your answer with an example?
7. Explain various access specifiers supported by Java.
8. Write about the garbage collection.
9. (a) illustrate the usage of 'this' keyword.
(b) List out the various ways of 'static' keyword usage.
10. Explain the concept of nested classes with example program.

Unit 3:

1. What are different types of inheritances? Discuss with example for each?
2. A) Explain creating packages and accessing a package with example.
B) What is exception? How exceptions are handled in Java programming? Explain
3. What are the uses of "super" key word? Explain with example.
4. With suitable code segments illustrate various uses of "final" keyword.
5. What is method overriding? Explain with example program.
6. What is the abstract class? Explain how it is useful in Inheritance.
7. (a) Explain the Concept of Interface with example program.
(b) What is the difference between an interface and an abstract class?
8. Explain creating packages and accessing a package with example.
9. What are the various types of exceptions available in Java? Also discuss on how they are handle?

10. (a) How to define a user exception in a program? Illustrate with an example?
(b) What is the use of Assertions? Explain with example.

Unit 4:

1. Explain thread life cycle in Java?
2. (a) How to read data in a java file? Discuss.
(b) What is a Daemon thread? Explain
3. What is Thread Synchronization? Discuss with an example.
4. Explain about inter-thread communication with producer-consumer problem.
5. (a) How priorities are given to the Threads. Explain.
(b) What is stream? What is difference between byte stream and character stream.
6. (a) Write a program to implement multi-thread programming.
(b) Write a program to read and display some content from a file into another file.
7. (a) Write about the Thread suspension and resume methods.
(b) List the methods in Thread class.
8. Explain various ways to create threads?
9. Explain the use of join() and isAlive() methods.
10. (a) Differentiate between multi-threading and multi-tasking?
(b) Discuss about reading the console input?

Unit 5:

1. A) Discuss about inner class.
B) Assume that you have a simple applet that displays a message with HTML text file to execute that applet in a web browser?
2. A) Briefly explain about life cycle of Applet.
B) Discuss about one modern mechanism to handle events.
3. A) Discuss about java.awt.event.InputEvent class.
B) Discuss about java.awt.event.KeyEvent class.
4. A) Write a simple applet program to display a string "India won by 6 wickets".
B) List difference between Applet & Application program.
5. A) What is the Role of event Listener in the event handling?
B) List the java event listeners.
6. A) Explain event delegation model.
B) Write an applet to display a smiley with greeting message to the user.
7. What is an Adapter class? Give two example for it.
8. A) Compare nested class with inner class. Give example for each.
B) What are the sources of events?
9. A) Differentiate between init() and start() methods of the Applet class.
B) What is an event? Write an example to handle event.
10. A) Write an Applet program that has different Shapes on it.
B) Explain ActionEvent with suitable example.

Unit 6:

1. A) Give a note on layouts in AWT. Or Why layouts are needed?
B) Differentiate between Text field and Text area and also discuss it's constructors and method.
2. A) Write a java program that computes factorial of a number when you enter that number in text field.

B) Write a note on dialog box usage in user interfaces (6 m)
3. Develop an example that illustrates how to create and display a label containing

both an icon and a string.

4. A) Explain about JCheckBox class.
B) Explain about JComboBox class.
5. A) Develop java program that changes the color of a filled circle when you make a right click.
B) Write an example java program that displays four push buttons and a text field. Each button displays an icon that represents the flag of a country. When a button is pressed, the name of that country is displayed in the text field.
6. A) Explain JTree Swing components with suitable example.
B) Give an overview of JButton class
7. A) Explain the creation and manipulation of menus.
B) Discuss various AWT containers with examples.
8. A) Construct an application to explain the use of JTabbedPane.
B) Write a note on split Pane. (6 m)
9. A) Differentiate between swing components and AWT components
B) What is the significance of Layout managers? Discuss briefly various layout managers. (10 m)
10. A) Write a program to create a frame for a simple arithmetic calculator using swing components and layout managers.

B) Develop a java program that have 11 text fields one submit button. When you press the button first 10 text field's average has to be displayed in the 11 text field.