

ADVANCED JAVA PROGRAMMING

CODE: PCS703S

UNIT – I

5 MARK:

- 1) Write a note on constructor overloading with an example.
- 2) List out the rules for method overriding.
- 3) What is the purpose of abstract class? Explain.
- 4) In java why string class is called as immutable object- explain with an example.

- 5) Illustrate the difference between compile time and run

Time polymorphism with an example.

- 6) Illustrate with an example about how multiple inheritance applied in java.
- 7) Explain the operators and their primitives in java.
- 8) What is a class? How does it accomplish data hiding?
- 9) What is inheritance? Explain multilevel inheritance.
- 10) Discuss overriding method with a suitable example.
- 11) Write a note on overloading method.
- 12) Write the features of java.
- 13) What is access protection? Explain.

10 MARK:

- 1) What are the different data types in java? Explain.
- 2) Explain multilevel inheritance with an example.

- 3) In a multilevel inheritance how do you access private variable from super class to sub class using the modifier super?
- 4) With syntax explain any four control statements in java.
- 5) Write a java program using multiple inheritance concepts for student report preparation.
- 6) Discuss the various levels of access protection available for package and their implications. Write the steps involved in importing a package.
- 7) Explain in detail the features of java?

UNIT – II

5 MARK:

- 1) Briefly explain about thread.
- 2) How a default package can be imported automatically to any java program? Develop a package called sjc.msc with one or more class to display your college information.
- 3) Explain about multi-threading.
- 4) How do the inter thread communication is supported in java?
- 5) Explain the life cycle of a thread.
- 6) Give the advantages of multithreading.

10 MARK:

- 1) Explain the different types of exceptions and its handling mechanism.
- 2) Explain in detail about packages in java.
- 3) Discuss briefly about exception handling.
- 4) Define package. How to create a package? Explain.
- 5) How the thread is implemented in java? Explain any one of the method?

UNIT – III

5 MARK:

- 1) Write a note on card layout.
- 2) Discuss the relation between component, container and layout manager with suitable examples.
- 3) Write the AWT menu class hierarchy with a neat diagram.
- 4) List and explain about various types of layout in java.
- 5) Discuss briefly about the label class in AWT.
- 6) Briefly explain the swing architecture in java.
- 7) Write the advantages of swing components over AWT.

10 MARK:

- 1) What is list? Explain the list construction in AWT with an example.
- 2) Develop a JDBC program which will list various branches available in your college with a classification of UG and PG.
- 3) Explain the different classes of AWT.
- 4) Explain menu bar and menu in AWT with example?
- 5) Explain the major components in the AWT.
- 6) Write a java program using AWT classes and explain.
- 7) Write a java program for ODBC/JDBC driver connection.
- 8) With a help of an example, explain swing components.

UNIT – IV

5 MARK:

- 1) What is Inet address? Explain.
- 2) Explain the concepts of sockets.

- 3) Develop a java program to find IP address of a given system and explain briefly about factory methods.
- 4) What is socket and socket connection? List out the class and methods available in java to develop socket connection?
- 5) Write short notes on TCP/IP sockets.
- 6) Write a program to establish a TCP connection.
- 7) Compare TCP and UDP protocols.
- 8) Discuss about net addressing.
- 9) Write a program for TCP client.

10 MARK:

- 1) Describe the concepts of UDP.
- 2) Write a java program for UDP server.
- 3) Develop a socket connection program using UDP.
- 4) Explain the client server computing with sockets in java.
- 5) Explain the concepts of socket programming in detail?
- 6) Write a program for client server computing using UDP.

UNIT – V

5 MARK:

- 1) Explain: RMI with client – side callbacks.
- 2) Develop a simple servlet program to print date and time.
- 3) Explain briefly any two parameters in RMI.
- 4) Explain briefly how to serialize remote objects.
- 5) Write the advantages of servlets.

10 MARK:

- 1) Discuss the RMI architecture in detail.
- 2) Develop a simple servlet program to pass parameters from one servlet to another servlet.
- 3) Develop a simple RMI application and develop all graphical user interfaces using swing?
- 4) Explain in detail the servlet architecture in java.