

Sixth Semester B.E. Degree Examination, Dec.2024/Jan.2025

Java for Mobile Applications

Time: 3 hrs.

Max. Marks: 100

*Note: Answer any FIVE full questions, choosing ONE full question from each module.***Module-1**

- 1 a. Demonstrate how enumerations can be applied as class types with suitable example. (10 Marks)
- b. Write a java program that demonstrates use of various wrapper classes. (10 Marks)

OR

- 2 a. "Despite of the performance benefits offered by the primitive data types, there are situations when you will need an object representation of the primitive data type". Justify the statement with reference to type wrappers. Also explain the type wrapper hierarchy. (10 Marks)
- b. Write a java program that declares the weekdays enum having the values / constants from SUNDAY to SATURDAY and prints the ordinal values of MONDAY and WEDNESDAY. The program should also display all week days using values () method and for-each loop. (10 Marks)

Module-2

- 3 a. List and explain the recent changes made to collection framework. Also mention the benefits from it. (10 Marks)
- b. Demonstrate the ArrayList Class and its various methods with suitable example. Also mention its benefits. (10 Marks)

OR

- 4 a. Discuss the methods defined by SortedSet and Deque Interfaces. (10 Marks)
- b. Illustrate the various methods defined in LinkedList class used for manipulating Java LinkedList. (10 Marks)

Module-3

- 5 a. Write a Java program to instantiate different constructors supported by string class. (10 Marks)
- b. Explain the following constructors of StringBuffer class : (10 Marks)
 - (i) StringBuffer ()
 - (ii) StringBuffer (int size)
 - (iii) StringBuffer (String str)
 - (iv) StringBuffer (Char Sequence Chars)

OR

- 6 a. Demonstrate the following string operations :
- (i) String Literals
 - (ii) String Concatenation
 - (iii) String Concatenation with other datatypes
 - (iv) String conversion and toString ()
- (10 Marks)
- b. With relevant example, explain the following StringBuffer methods :
- (i) ensureCapacity ()
 - (ii) SetLenght ()
 - (iii) getChars ()
 - (iv) append ()
 - (v) insert ()
- (10 Marks)

Module-4

- 7 a. What is Android? Discuss Android Architecture with suitable diagram. (10 Marks)
- b. Demonstrate the use of Intents in linking two activities and its methods for transferring data using an example. (10 Marks)

OR

- 8 a. Explain the various features of Android. (10 Marks)
- b. List the various stages of an android activity with its corresponding methods. Also explain the Android Activity Life cycle with neat diagram. (10 Marks)

Module-5

- 9 a. Discuss the following view groups including its variations (if any):
- (i) Table Layout
 - (ii) Relative Layout
 - (iii) Scroll view
- (10 Marks)
- b. Explain DBAdapter Helper Class. Illustrate the code snippet for retrieving a single contact using DBAdapter. (10 Marks)

OR

- 10 a. With relevant code snippet, explain the use of following views :
- (i) Button
 - (ii) ToggleButton
 - (iii) Radio Button
 - (iv) Radio Group Views
- (10 Marks)
- b. Illustrate the steps followed in processing the user input entered in an EditText field using suitable Code Snippet. (10 Marks)
