



CBCS SCHEME

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18AI63

Sixth Semester B.E. Degree Examination, June/July 2023

JAVA for Mobile Application

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Explain Java enumerations and write a code to demonstrate how varieties of apple can be represented through enumerations. (08 Marks)
- b. Explain following methods with suitable code snippet: (i) Values (ii) ValueOf (04 Marks)
- c. Explain type wrappers along with its importance and write a Java program to demonstrate how to use a numeric type wrapper to encapsulate a value and then extract that value. (08 Marks)

OR

- 2 a. Write a Java code that uses reflection to display the annotation associated with a method. Illustrate all methods used in the program. (10 Marks)
- b. Write a Java code to demonstrate auto boxing/unboxing occurs in expressions. (10 Marks)

Module-2

- 3 a. Explain the following collection classes with suitable code snippet: (i) The ArrayList Class (ii) The LinkedList Class (10 Marks)
- b. Explain the collection framework core interfaces. Describe any two methods associated with Collection Interface. (10 Marks)

OR

- 4 a. Explain below listed methods with respect to algorithm defined inside collection framework (i) reverseOrder (ii) Shuffle (10 Marks)
- b. Write a Java code to demonstrate custom comparator, which implements the compare() method for string that operates in reverse of normal. (10 Marks)

Module-3

- 5 a. Explain the two string methods that returns the first occurrence of a character and last occurrence of a character. Illustrate same with suitable Java code. (10 Marks)
- b. Illustrate how to modify a string using a following methods: (i) substring() (ii) concat() (iii) replace() (iv) trim() (10 Marks)

OR

- 6 a. With relevant example, explain the following String Buffer methods: (i) ensureCapacity() (ii) setLength() (iii) append() (iv) insert() (10 Marks)
- b. Demonstrate how following methods can be used in character extraction: (i) charAt() (ii) getChars() (iii) getBytes() (iv) toCharArray() (10 Marks)

Module-4

- 7 a. With a neat block diagram, explain the architecture of android. (10 Marks)
- b. With suitable code snippet, explain linking activities using intents. (10 Marks)

OR

- 8 a. What is an activity? With a neat diagram, explain the Activity Life Cycle. Describe all the events associated. (10 Marks)
- b. Summarize the states, a fragments goes through after its creation. List the different methods that are called when fragment transists from one state to another. (10 Marks)

Module-5

- 9 a. Describe the following layout available in android: (i) Linear layout (ii) Relative layout (10 Marks)
- b. Describe progress bar view with suitable code snippet. (10 Marks)

OR

- 10 a. Write a code to build mobile application to retrieve contacts from database. (10 Marks)
- b. Write a Java code to build a Quiz Application by using Radio Group Class. Consider a suitable view for designing the front end. (10 Marks)

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