53 (IT 501) JVPR

## 2018

## JAVA PROGRAMMING

Paper: IT 501

Full Marks: 100

Time: Three hours

The figures in the margin indicate full marks for the questions.

## Answer any five questions.

 (a) "Java is called Machine Independent Language" — Justify this statement with proper explanation.

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(b) What is variable length argument in Java? Explain with example.

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- (c) Write a program that accepts a shopping list of five items from the command line and store them in vector. Modify the program to accomplish the following:
  - · to delete an item in the list.
  - to delete an item at a specified location in the list.
  - to add an item at the end of the list.
  - · to print the content of the vector.

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 (a) Describe the various forms of implementing interfaces. Give examples of Java Code for each case.

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- (b) How to share the data among the functions with the help of static keyword? Give example.
- (c) What are different types of packages available in Java? Explain with examples.

 "Multiple threads try to access the same resources and finally produce erroneous and unforeseen results" — Justify this statement and provide a way to solve the problem.

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4. (a) Write a Java program to create a try block that is likely to generate three types of exceptions and incorporate necessary catch blocks to catch and handle them appropriately.

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- (b) What are different types of attributes of <APPLET> tag? Explain with examples.
- 5. (a) Write a program that will count the number of characters, words, and lines in the file.
  - (b) What is meant by event handling in Java? How does it work?

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Write a Java program to create a simple calculator with basic +, -, /, \* using java swing elements.

- 7. Write short notes on : 20
  - (a) Wrapper Classes
    - (b) Use of super keyword
    - (c) Separators
    - (d) Scope of variables in Java.

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