## **FACULTY OF ENGINEERING**

B.E. (AI&DS) III - Semester (AICTE) (Main) Examination, March/April 2022

Subject: OOps Using Java

Max. Marks: 70 Time: 3 Hours

Note: (i) First question is compulsory and answer any four questions from the remaining six questions. Each question carries 14 marks.

- (ii) Answer to each question must be written at one place only and in the same order as they occur in the question paper.
- (iii) Missing data, if any, may be suitably assumed.
- 1 (a) Why is Java known as platform independent?
  - (b) Define data abstraction.
  - (c) What is the use of super keyword?
  - (d) Discuss various methods used to create threads.
  - (e) What is a stream? What are 2 types of stream that Java defines? List two I/O classes in each category.
  - (f) Explain the types of exceptions.
  - (g) What are the merits of swing components over AWT?
- 2 (a) Write a program to find sum of numbers passed as command line arguments.
  - (b) What is an array? How arrays are declared and initialized? Explain with example.
- 3 (a) Does Java support run-time polymorphism. Illustrate with an example.
  - (b) Write about access specifiers in Java.
- 4 (a) Differentiate between ArrayList and Vector.
  - (b) What combination of classes can be used to write and read serializable directs to and from a file? Illustrate with an example.
- 5 (a) Example about event classes and event listeners interfaces.
  - (b) Discuss the four types of JDBC driver with suitable diagrams.
- 6 (a) Explain about servlet life cycle.
  - (b) Explain various components of Swing.
- 7 Write short note on:
  - (a) Packages
  - (b) Final Keyword
  - (c) Exception Handling.