

**II B. Tech II Semester Supplementary Examinations, June/July - 2022**  
**JAVA PROGRAMMING**  
(Com to CSE, IT)

Time: 3 hours

Max. Marks: 70

- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)  
2. Answer **ALL** the question in **Part-A**  
3. Answer any **FOUR** Questions from **Part-B**

**PART -A**

1. a) What is dynamic binding? Discuss with an example JAVA code. (2M)
- b) Write JAVA code to define a class, define instance methods for setting and Retrieving values of instance variables and instantiate its object. (3M)
- c) What is the impact of declaring a method as final? (2M)
- d) Which class is used to read the contents of a file as a stream of bytes? Discuss with an example JAVA code. (3M)
- e) An applet can run multiple threads? Give the JAVA code. (2M)
- f) Describe the Flow Layout Manager with an example JAVA code. (2M)

**PART -B**

2. a) Write a JAVA program which takes two integer numbers as input and returns the minimum of these two. (7M)
- b) How the JVM runs the java byte code? Discuss it with a diagram. (7M)
3. a) Create a JAVA class that lets you create a single-dimensional array of integers at runtime using command line inputs. Print the Minimum and Maximum integers in that array. (7M)
- b) Create a JAVA class to read a string from the command line and extract 'n' number of characters from the given character.(Example:- Input String: *PROGRAMMING*, n is 4, a character is 'G', and output is: *GRAM*) (7M)
4. a) Discuss various subclasses of the Exception class. (6M)
- b) Design a JAVA package to show the dynamic polymorphism and interfaces. (8M)
5. a) Write a JAVA program to show multithreaded producers and consumer applications. (7M)
- b) Create a JAVA program that reads the contents of a file *My\_Text\_File* and reverses each word and writes it to destination file *My\_Text\_File2* (7M)
6. a) Describe various methods from *KeyListener* interface with an example JAVA code. (7M)
- b) Design an Applet displaying circle based on the user inputs for the radius and fill the circle with the given color. (7M)
7. a) Design a JAVA program that creates a 7×3 grid and fills it in with 20 buttons, each button labeled with its index. (7M)
- b) What are the various constructors of a *TextArea* class? Explain with an example program. (7M)