

R18

Code No: 154CE

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech II Year II Semester Examinations, April/May - 2023

OBJECT ORIENTED PROGRAMMING USING JAVA

(Common to CSBS, CSIT, ITE, CE(SE), CSE(CS), CSE(AI&ML), CSE(DS), CSE(IOT), CSE(N))

Time: 3 Hours

Max. Marks: 75

Note: i) Question paper consists of Part A, Part B.

ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.

iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

PART – A

(25 Marks)

- 1.a) What is meant by ad-hoc polymorphism? [2]
- b) Why 'main ()' method is declared as public static in JAVA programming? [3]
- c) List out the benefits of Stream oriented I/O. [2]
- d) Contrast between abstract class and interface. [3]
- e) What if there is a break or return statement in try block followed by finally block? [2]
- f) Describe synchronization in respect to multithreading. [3]
- g) Explain briefly about vector class with an example. [2]
- h) Which methods of deque enable it to be used as a stack? [3]
- i) List the advantages and disadvantages of applet. [2]
- j) What is Swing in Java? How it differs from Applet? [3]

PART – B

(50 Marks)

- 2.a) List the primitive data types available in Java and explain.
- b) What is method overloading? Explain with an example program. [5+5]

OR

- 3.a) Explain the important principles of Object Oriented Programming Paradigm.
- b) With a neat diagram, explain the Java Virtual Machine architecture. [5+5]

- 4.a) Discuss about CLASSPATH environment variables.
- b) Write a program to read and write disk file character by character using Reader and Writer classes. [5+5]

OR

- 5.a) What is interface? Write a java program to illustrate the use of interface.
- b) What is type wrapper? What is the role of auto boxing? [5+5]

- 6.a) What are advantages of using Exception handling mechanism in a program?
- b) Write a java program that demonstrates how certain exception types are not allowed to be thrown? [5+5]

OR

- 7.a) What are the different ways that are possible to create multiple threaded programs in java? Discuss the differences between them?
b) Explain how to handle arithmetic exception by giving a suitable example. [5+5]

- 8.a) What is Java Collections Framework? List out some benefits of Collections framework and explain.
b) Write a program to read a file content and extract words using String Tokenizer class. [5+5]

OR

- 9.a) What is the importance of hashCode() and equals() methods?
b) Explain briefly about iterator with an example. [5+5]

- 10.a) Explain the process of event handling through delegation model.
b) Write an applet program that will take an input from the user to calculate the sum of two integers. [5+5]

OR

- 11.a) Explain various event adapter classes in awt and also give their syntaxes in java.
b) Write a program in awt to design the registration form. [5+5]

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