

Code No.: CS6140E

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CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
III-B.TECH-II-Semester End Examinations (Supply) - January- 2024
JAVA PROGRAMMING
(ECE)

[Time: 3 Hours]

[Max. Marks: 70]

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART-A

(20 Marks)

1. a) What is data abstraction? [2M]
- b) What is type casting? Explain with an example. [2M]
- c) Distinguish between abstract class and concrete class. [2M]
- d) How to create and access a package? [2M]
- e) What keywords are essential in handling user-defined exception? [2M]
- f) List any six built-in exceptions in Java. [2M]
- g) Explain the methods defined by Vector. [2M]
- h) What is the use of String Tokenizer class? [2M]
- i) Explain the use of layout managers. [2M]
- j) What are the merits of swing components over AWT? [2M]

PART-B

(50 Marks)

2. a) What is the usage of enumerated data type? Give examples. [5M]
 - b) Explain the different types of constructors with an example. [5M]
- OR**
3. a) Write a program to find the transpose of a given matrix. [5M]
 - b) Explain the scope and life time of the variable. [5M]
4. a) Explain the different parameter passing mechanisms used in Java with an example. [5M]
 - b) Explain the various access specifiers are used in java. [5M]
- OR**
5. Design an interface called Shape with methods draw() and getArea(). Further design two classes called Circle and Rectangle that implements Shape to compute area of respective shapes. Use appropriate getter and setter methods. Write a java program for the same. [10M]
6. a) How to define a package? How to access, import a package? Explain with an examples. [5M]
 - b) What is a nested class? Distinguish between static nested classes and non-static nested classes. [5M]
- OR**
7. Explain the need of thread synchronization. How is it achieved in Java programming? Explain with a suitable program. [10M]

8. a) Explain the file management using File class. [5M]
b) Write a program which stores a list of strings in an ArrayList and then displays the contents of the list. [5M]

OR

9. a) Discuss the four types of JDBC driver with suitable diagrams. [5M]
b) Write a JDBC program to update the amount balance in an account after every withdrawal. Assume the necessary database table. [5M]

10. Write an applet program to handle all mouse events. [10M]

OR

11. Design a user interface to collect data from the student for admission application using swing components. [10M]
