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Question Paper Code : 10447

B.E./B.Tech. DEGREE EXAMINATIONS, APRIL/MAY 2025.

Third/Fourth/Fifth Semester

CS 8392 – OBJECT ORIENTED PROGRAMMING

(Common to: Computer Science and Engineering/Computer and Communication Engineering/Electrical and electronics Engineering/Electronics and Communication Engineering/Electronics and Instrumentation Engineering/Electronics and Telecommunication Engineering/Instrumentation and Control Engineering/Artificial Intelligence and Data Science/Computer Science and Business Systems/ Information Technology)

(Regulations – 2017)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Why java is important to the internet?
2. Define Bytecode and JVM.
3. What are the two uses of super keyword?
4. Write a general form to declare an abstract method.
5. Write the structure of exception hierarchy.
6. List any four character stream I/O classes.
7. What is the method used to set a thread's priority and what are the values of the argument passed to that method to set thread's priority?
8. What is the syntax for declaring a generic class in Java?
9. Differentiate between AWT and Swing in Java.
10. How can you add images to a Java Swing application?

PART B — (5 × 13 = 65 marks)

11. (a) Explain about different types of constructors implemented in Java. Give suitable examples.

Or

- (b) Discuss about different datatypes and operators used in Java.

12. (a) Explain how final keyword is used to prevent overriding and inheritance.

Or

- (b) Explain how multiple inheritance concept is implemented in Java using interface. Give suitable example.

13. (a) Discuss in detail about the Java's Built-in exceptions inside java.lang package.

Or

- (b) Explain in detail about Reading and writing to console input and console output in Java.

14. (a) Discuss in detail about the methods in Java's Inter process communication to avoid polling.

Or

- (b) Explain in detail about the concept of bounded type parameters in java generics.

15. (a) Compare and contrast the use of Mouse Listener and Mouse Motion Listener interfaces in java Swing for handling mouse events. Provide examples.

Or

- (b) Create a Java Swing application that allows users to select items from a list and display the selected items in a text area.

PART C — (1 × 15 = 15 marks)

16. (a) Design an abstract class 'Bank' with abstract method 'calculateInterest()' and two subclasses 'SavingsAccount' and 'FixedDeposit' implementing this method.

Or

- (b) Implement a super class 'Animal' with a protected method 'eat()'. Create a subclass 'Dog' that overrides 'eat()' method to print "Dog is eating".