Final Examination: Major Test

Short answer type questions

Attempt Any 10 Questions. **2*10=20**

1. What is the default value of an int variable in Java?
2. Which method is used to get the length of a string in Java?
3. What is the use of the final keyword in Java?
4. What is the parent class of all classes in Java?
5. What does the static keyword mean in Java?
6. How do you define a constant in Java?
7. What is the difference between == and equals() in Java?
8. What is method overloading in Java?
9. What is the difference between a constructor and a method?
10. What is a JVM in Java?
11. What is the use of the super keyword in Java?
12. What is an abstract class in Java?
13. What is the significance of the this keyword in Java?
14. What is a package in Java?
15. What is garbage collection in Java?
16. How do you handle exceptions in Java?
17. What is the return type of the hashCode() method in Java?
18. What is an interface in Java?
19. What is the main difference between an Array and an ArrayList in Java?

20. What is multithreading in Java?

Practical Question

Attempt Any 10 Questions. **5*10=50**

1. Write a Java program to check if a number is even or odd.

2. Write a program to find the sum of all elements in an array.

3. Write a Java program to find the factorial of a number.

4. Write a program to check if a string is a palindrome or not.

5. Write a Java program to print the Fibonacci series up to a given number.

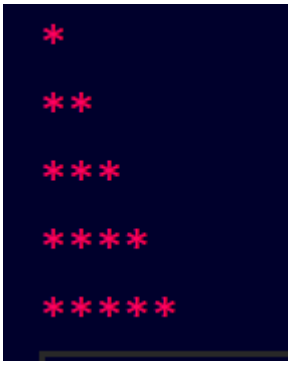
6. Write a Java program to reverse an array.

7. Write a program to check if a number is prime.

8. Write a Java program to swap two numbers using a third variable.

9. Write a Java program to find the largest of three numbers.

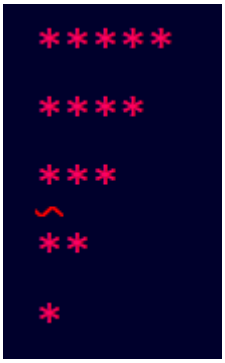
10. Write a program to print the following star pattern:



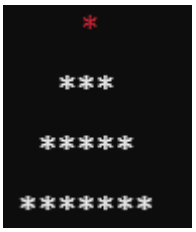
11. Write a program to implement Bubble Sort in Java.

12. Write a Java program to demonstrate the concept of method overloading.

13. Write a program to print the following star pattern:



14. Write a program to print the following pyramid pattern:



15. Write a Java program to check if two strings are anagrams.

16. Write a Java program to implement linear search on an array.

17. Write a Java program to demonstrate the use of inheritance by creating a base class Animal and subclass Dog.

18. Write a program to print the following diamond pattern:

19. Write a Java program to implement multithreading by extending the Thread class and implementing the Runnable interface.

20. Write a Java program to implement a Singleton design pattern.

“हर कठिनाई के पीछे एक बड़ा अवसर छुपा होता है।"

(Every challenge hides a great opportunity.)

Best Of Luck