



- Notes :
1. All questions are compulsory.
 2. All questions carry equal marks.
 3. Due credit will be given to neatness and adequate dimensions.
 4. Assume suitable data wherever necessary.
 5. Diagrams and Chemical equation should be given wherever necessary.
 6. Illustrate your answers wherever necessary with the help of neat sketches.

1. a) Write a program to print multiplication of two matrices taking Input from console. **8**
- b) Compare C++ and JAVA as programming languages. **8**

OR

2. a) Define Class and Object. Explain syntax to create class and Object in JAVA. **8**
- b) Differentiate OOP and POP with suitable diagram and give example of each. **8**
3. a) Explain try, catch, throw, finally with its syntax. **8**
- b) Write a program to create two thread. One thread will print Even numbers from 1 to 10 and another thread will print odd numbers from 11 to 20. **8**

OR

4. a) What is mean by Exception. Explain Java Exception handling mechanism in detail. **8**
- b) Explain threads. List and explain any four thread methods with its syntax. **8**
5. a) Define applet. Give advantages of Applet. Write Java code to display "Hello World" using Java Frame. **8**
- b) Explain AWT API with class hierarchy with neat labeled diagram. **8**

OR

6. a) Write a program to create applet which display circle, rectangle, triangle one below the others and filled the red green and yellow colors respectively. **8**
- b) Explain AWT container class in detail using neat labeled diagram. **8**
7. a) What is JDBC. Write and explain 5 steps to connect java application with database using JDBC. **8**
- b) Define and explain stream. Explain important Bytestream classes. **8**

OR

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| 8. | a) | Write a program in java to create output.txt file using some content in input.txt file. | 8 |
| | b) | Explain JDBC. Explain various JDBC drivers. | 8 |
| 9. | a) | Explain types of proxies with neat labeled diagram. | 8 |
| | b) | Explain URL class. List various methods of URL class with their uses. | 8 |

OR

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|------------|----|--|----------|
| 10. | a) | List and explain classes and interfaces of java.net package. | 8 |
| | b) | Explain TCP/IP socket giving client and server code. | 8 |
