

**MCA/MSc. (CS)-I Mid Semester Examination 2025-26**  
**CS204: Object Oriented Programming**

**Time : 1 hour**

**20 Marks**

1. Write a java program to implement the below mentioned scenario. Create a class Person with fields name (String), age (int), method `displayDetails()` (prints name and age). Create a class Staff that extends Person with details `staffId` (String) `department` (String), methods `displayDetails()` which overrides Person's method, prints name, age, staff ID, and department `conductMeeting()` which prints a message about conducting a meeting. Create a class Faculty which extends Staff with details `specialization` (String), `coursesTaught` (List of Strings), method `displayDetails()` which overrides Staff's method, prints all details including specialization and courses, method `teachCourse()` which takes a course name and prints a message about teaching it.
2. Write a Java program that takes an 8-element boolean array as input, where each boolean represents a bit (e.g., true for 1, false for 0), and converts it into its equivalent two-character hexadecimal string representation. The first element of the array represents the least significant bit (LSB). Example: Input: `boolean[] bits = {true, false, true, false, true, false, true, false}` (binary 01010101), Output: "55"