C Language Test Paper

Instructions: Attempt all questions. Use only if-else, operators, for loop, and while loop. Each question carries 20 marks.

Q1. Car Parking System (20 Marks)
A shopping mall has limited parking.
Write a C program that:
1. Asks how many vehicles are entering.
2. For each vehicle:
- Type = Bike (■20/hr), Car (■50/hr), Truck (■100/hr)
- Hours parked = input
3. Calculate total parking charges.
4. If total charge > ■500 → apply 10% discount.
5. If vehicles > 10 → show 'Parking Full – No More Entry'.
6. Print the final collected amount.

Q2. Zomato Food Ordering System (20 Marks)
Write a C program that simulates food ordering.
1. Show menu:
- 1. Pizza – ■200
- 2. Burger – ■100
- 3. Momos – ■80
- 4. Coffee – ■120
2. Ask user: How many items do you want to order?
3. For each item: input item number and quantity.
4. Calculate bill.
5. If total > ■500 → Free delivery else add ■50.
6. If only coffee ordered → give 20% discount.
7. Print final bill.

Q3. Electricity Bill Management (20 Marks)
Write a C program for electricity billing.
1. Input number of customers.
2. For each customer: input name and units consumed.
3. Charges:
- Units ≤ 100 → ■5/unit
- 101–300 units → ■7/unit
- >300 units → ■10/unit
4. If bill > ■2000 → apply 5% surcharge.
5. Print each customer’s name, units, and bill.

Q4. ATM Withdrawal Simulation (20 Marks)
Write a C program to simulate ATM transactions.

1. Start with balance = ■10000.
2. Ask number of transactions.
3. For each transaction:
- 1 → Withdraw
- 2 → Deposit
- 3 → Balance Inquiry
4. Withdrawal conditions:
- Should not exceed balance.
- Maximum withdrawal = ■5000 at once.
5. At the end, show final balance.

Q5. Student Result Management (20 Marks)
Write a C program for n students.
1. For each student, input marks of 5 subjects.
2. Calculate total and percentage.
3. Assign grade:
- ≥90% → Grade A
- 70–89% → Grade B
- 50–69% → Grade C
- <50% → Grade F
4. If grade = F → print 'Better Luck Next Time'.
5. At the end → print topper’s name and percentage.
