Total Mark: 30

1) Write a C program that takes an integer input from the user and determines whether the entered number is even or odd using switch case. Note: you are not allowed to use if-else statement.

[2 marks]

2) Write a C program that takes three integers as input from the user and determines the largest number among them.

[3 marks]

- 3) Write a program that calculates the interest rate on a credit card balance. The interest rate is determined by the credit score: 15% for scores below 600, 12% for scores between 600 and 750, and 10% for scores above 750. The input is the credit score and the current balance. The output should be the calculated interest.

 [5 marks]
- 4) Write a C program to print day of week using switch-case. An integer input will be given by the user where 1 means Monday, 2 means Tuesday and so on. If input lies outside 1 to 7, print "incorrect input".

[5 marks]

- 5) Write a C program that takes 3 digit number input from the user and find whether it is an Armstrong number or not. An Armstrong number of three digits is an integer such that the sum of the cubes of its digits is equal to the number itself. Print "Yes" if it is an Armstrong number else print "No". If input lies outside 100 to 999, print "incorrect input". NOTE: 371 is an Armstrong number since 3^3 + 7^3 + 1^3 = 371 [5 marks]
- 6) Write a C program to create a simple Calculator using switch case statement. The user should be able to provide two integers as input and the allowed operations are +, -, * and /.

[5 marks]

7) Write a program for a theme park that calculates ticket prices based on age groups. Children under 5 enter for free, ages 5-12 have a child rate of 20, ages 13-59 have a standard rate of 50, and seniors 60 and above have a discount of 20% on the standard rate. The input is the age, and the output is the ticket price [5 marks]