



BASIC QUESTIONS: 3 MARKS

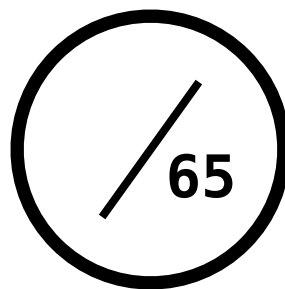
CODE: 5 MARKS

TRACE TABLES: 6 MARKS

week 2\_3:

CW3 (1h 30m)

YOUR SCORE:



**rajin teaches programming**

NAME: \_\_\_\_\_

## SECTION A: THEORY

**Q1. Explain the purpose of using looping structures in programming.**

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**Q2. Differentiate between the for, while, and do-while loops in C programming.**

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. At the top of the page, there is a faint, light gray watermark or header area containing stylized, large letters that appear to be "ECP". Below this header, the rest of the page is filled with the horizontal ruling lines.

**Q3. Discuss the concept of loop control variables and their role in looping structures.**

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**Q4. What is the significance of loop termination conditions? Explain with an example.**

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**Q5. Describe the difference between pre-test and post-test loops, citing examples.**

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## SECTION B: PROBLEMS

Q6. Write a C program to print the first 10 natural numbers using a while loop.

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Q7. Create a C program to find the sum of all even numbers between 1 and 100 using a for loop.

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**Q8. Develop a C program to generate the Fibonacci series up to n terms using a do-while loop.**

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**Q9. Implement a C program to calculate the factorial of a number using a for loop.**

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**Q10. Write a C program to print the multiplication table of a given number using a while loop.**

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**Q11. Create a C program to check whether a given number is prime or not using a for loop.**

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**Q12. Develop a C program to find the factorial of a number using a do-while loop.**

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**Q13. Write a C program to reverse a given number using a while loop.**

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Q14. Implement a C program to find the sum of digits of a number using a for loop.

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Q15. Create a C program to print a left-aligned triangle of height 5.

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WHAT DO YOU THINK ABOUT THE QUESTIONS?



TOO EASY,  
TRY HARDER NEXT TIME



NORMAL



TOO HARD,  
I STRUGGLED A LOT.