

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
FOURTH SEMESTER B.TECH DEGREE EXAMINATION(R&S), MAY 2019

Course Code: AU208

Course Name: COMPUTER PROGRAMMING (AU)

Max. Marks: 100

Duration: 3 Hours

PART A

Answer any three full questions, each carries 10 marks.

- | | | Marks |
|---|--|-------|
| 1 | a) Differentiate between High Level, Assembly and Machine Language | (5) |
| | b) What is IDE? Explain with examples of IDE used for Developing C. | (3) |
| | c) Write on Assembler. | (2) |
| 2 | a) State different uses of C in Automobile Industry | (3) |
| | b) Discuss Chip Burning. | (3) |
| | c) Difference between Compiler and Interpreter. | (4) |
| 3 | a) Explain different operators in C. | (3) |
| | b) What is typecasting in C. Explain with example of int to float | (3) |
| | c) Write a program to find sum of odd numbers up to N. | (4) |
| 4 | a) Explain different types of entry controlled loops in C. | (3) |
| | b) Write a program to to check whether the given number is prime or not. | (4) |
| | c) What are Integer Constants in C. | (3) |

PART B

Answer any three full questions, each carries 10 marks.

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|---|--|------|
| 5 | a) Write a program to implement Integer Array Sorting using Selection Sort. | (5) |
| | b) What are User Defined Data types. Write 2 Examples. | (2) |
| | c) Explain strev(), strcat() and strcmp() | (3) |
| 6 | a) How to pass 2 variables as References to a Function | (4) |
| | b) Write a program to find power of a number using Recursion without using pow() function. | (4) |
| | c) Explain Macros with Examples. | (2) |
| 7 | a) Write a program for finding sum of rows and columns in a Matrix. | (10) |
| 8 | a) What is Pre-processor Directive? | (2) |
| | b) Write a program for performing Binary Search. | (6) |

- c) Explain Scope of Variables with example of global Variable. (2)

PART C

Answer any four full questions, each carries 10 marks.

- 9 a) What is a pointer? Explain application of pointer in C. (6)
b) How can a pointer point to another pointer? Explain. (4)
- 10 a) Differentiate between stack and heap. (4)
b) Write a program to sort an integer array using pointers. (6)
- 11 a) What is meant by self referential structure? Explain with example. (4)
b) What is dynamic memory allocation? Explain the different dynamic memory allocation functions in C. (6)
- 12 a) Write a program to read numbers from a file and write even and odd numbers to separate files and their sum to another file. (10)
- 13 a) Explain the different steps involved in software development. (8)
b) Discuss any four file operation functions in C. (2)
- 14 a) Describe the file opening and file closing commands in C. (5)
b) Write a program to append to one file to another. (5)
