

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Third Semester B.Tech Degree (S,FE) Examination December 2020 (2015 Scheme)

Course Code: EE207**Course Name: COMPUTER PROGRAMMING**

Max. Marks: 100

Duration: 3 Hours

PART A*Answer all questions, each carries 5 marks.*

Marks

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|---|---|-----|
| 1 | Differentiate between compilers, interpreters and assemblers. | (5) |
| 2 | With suitable example differentiate between while () and do...while () statements. | (5) |
| 3 | What is an array? How can a two dimensional array be declared and initialized? | (5) |
| 4 | Explain recursion in C with an example. | (5) |
| 5 | What is union? How is it different from structure? | (5) |
| 6 | What are Pointer Expressions, Pointer Increments and Scale Factor? Illustrate with example. | (5) |
| 7 | What are various file handling functions in C? | (5) |
| 8 | Write a Python program to find factorial of a given integer. | (5) |

PART B*Answer any two full questions, each carries 10 marks.*

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|----|---|-----|
| 9 | a) Compare unary, binary and ternary operators in C. | (5) |
| | b) Draw a flow chart to input a character and check whether it is a vowel. | (5) |
| 10 | a) Write a C program to find the solution of a quadratic equation using 'Switch' statement. | (5) |
| | b) Write a C program to print Pascal's triangle having 'n' rows. | (5) |

1

1 2 1

1 3 3 1

1 4 6 4 1

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| 11 | a) Distinguish between high level language, assembly language and machine language. | (5) |
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- b) Write a C program to input code (1/2/3). Read a number and print the result based on the input option. Use if-elseif ladder (5)
1. check if the no is odd/even
 2. check if the no is positive / negative
 3. check if it is divisible by 5.

PART C

Answer any two full questions, each carries 10 marks.

- 12 a) With suitable example, explain terms: i) Function definition, ii) Function prototype, iii) Formal argument vii) Actual argument (6)
- b) Explain any four string handling functions in C with examples. (4)
- 13 a) What is meant by storage class specifier? Explain the 4 basic storage classes in C with examples. (10)
- 14 a) Write a C program to find the product of two matrices. (5)
- b) Develop a C program to sort given n names in alphabetic order? (5)

PART D

Answer any two full questions, each carries 10 marks.

- 15 a) Define a structure to store the complex number. Using this structure write a program to add and subtract two complex numbers. (5)
- b) Explain the basic control statements in Python. (5)
- 16 a) What is a pointer? Why they are used? How can you access a variable using chain of pointers? (5)
- b) Write a C program to sort an array of integers using pointers. (5)
- 17 a) How is a file pointer declared? What are the different modes of opening a file? Explain with one simple example. (5)
- b) Write a C program to copy the contents of one file to another. (5)
