

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
FOURTH SEMESTER B.TECH DEGREE EXAMINATION, APRIL 2018

Course Code: AE202

Course Name: COMPUTER PROGRAMMING (AE)

Max. Marks: 100

Duration: 3 Hours

PART A

Answer any two full questions, each carries 15 marks

Marks

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|---|----|--|-----|
| 1 | a) | Explain how a high level language is converted to machine language. | (5) |
| | b) | Draw a flowchart to illustrate the sequences of operations in a for loop. Give an example program | (5) |
| | c) | Write a C program to print half pyramid using * notation. | (5) |
| 2 | a) | Explain the functions of loader and linker. | (5) |
| | b) | Draw a flowchart to illustrate the sequences of operations in a while loop. Give an example | (5) |
| | c) | Write a C program to read a 3 digit number from user and to print the reverse of the number. | (5) |
| 3 | a) | Write a C program to swap 2 numbers stored in 2 variables without using 3 rd variable. | (5) |
| | b) | Draw a flowchart explaining the sequences of operations in a switch case. Give an example program. | (5) |
| | c) | Write a C program to convert centigrade reading of temperature to Fahrenheit value | (5) |

PART B

Answer any two full questions, each carries 20 marks

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| 4 | a) | Write a C program to multiply 2 matrices. Get sizes and elements of matrices from user. | (8) |
| | b) | Explain how command line arguments are used in C. Illustrate using example. | (7) |
| | c) | Write a C program to reverse a string. | (5) |
| 5 | a) | Write a C program to take an integer array of 10 numbers from user, and to sort it using bubble sort. | (8) |
| | b) | Write a C program to store and print student details using structure. Differentiate between structure and union. | (7) |
| | c) | What is function recursion? Write an example program. | (5) |
| 6 | a) | Write a C program for binary search. | (8) |
| | b) | Write a C program to read data from user and to write into a file. | (7) |
| | c) | Write a C program which stores a string "PROGRAM" into a character pointer and to print the following through pointer operations. | (5) |

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PART C

Answer any two full questions, each carries 15 marks

- 7 a) Write a program in Python to print first 10 numbers in Fibonacci series starting from 2, 3... (8)
b) Write a program in Python to find the sum of digits of a number given by user. (7)
- 8 a) Write a Python programme to get required parameters from user and to find the area and circumference of a circle. (8)
b) Compare constructs of Python with C (7)
- 9 a) Using examples illustrate differences between list, tuple and dictionary. (8)
b) Illustrate working of any three control statements in Python (7)
