B   **S2039**   **Pages: 2**

Reg No.:_____   Name:_____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
FOURTH SEMESTER B.TECH DEGREE EXAMINATION, DECEMBER 2018
Course Code: AE202
Course Name: COMPUTER PROGRAMMING (AE)

Max. Marks: 100   Duration: 3 Hours

PART A
Answer any two full questions. Each question carries 15 marks

1	a)	Compare compilers and Interpreters	4
	b)	What is an algorithm? Write the algorithm to find the largest among three numbers?	6
	c)	Distinguish between logical and bitwise operators in C with suitable examples?	5
2	a)	Compare an entry controlled and exit controlled loop with suitable examples	5
	b)	Write a program to accept a number and find the sum of digits of that number.	5
	c)	Write a program to display all the even numbers between two limits.	5
3	a)	Compare 'break' and 'continue' with suitable examples.	6
	b)	Draw the flowchart of switch statement. Write a C program to print the months in a year using switch case.	6
	c)	Predict the output of the following program?	3

```
#include<stdio.h>
void main()
{
int a=2,b=5,c=3;
if(a>b)
  if(c>b)  printf("ONE");
  else
  if(c==a)  printf("TWO");
  else printf("THREE");
else
printf("FOUR");
}
```

PART B
Answer any two full questions. Each question carries 15 marks

4	a)	Write a C program to find the transpose of a matrix	10
	b)	What are user defined functions? Explain how to write a user defined function?	6
	c)	Write a C program to find the square of a number using function	4

5 a) Write the different string handling functions in C. Explain with examples   4

   b) Define pointers. Describe how pointers can be used for an array of integers with   10
       suitable example.

   c) Write a C program to find the factorial of a number using recursion?   6

6 a) What is a structure in C? How is a structure declared? Write an example program.   10

   b) Which are the input and output functions used in C. Write a C program to create a   6
       file called NUMBERS. Find the average of all the elements in that file and then
       write the average to another file called AVERAGE.

   c) What are enumerated data types? Write a program to create enumerated data type   4
       for 12 months.

PART C
Answer any two full questions. Each question carries 20 marks

7 a) Write a python program to simulate a calculator   5

   b) Compare keywords and variables in C and Python with the help of examples   5

   c) Write a python program to find the area and perimeter of a circle   5

8 a) What is a string? What are the different ways of taking string slices? What is the 5
       difference between a string and a list?

   b) Write a python program to print a string in the reverse order   5

   c) Write a python program to print the Fibonacci numbers using function   5

9 a) What are dictionaries? Write a python program to create a dictionary that contain   4
       the marks and name of 5 students. Display the contents.

   b) What is a tuple in python? Compare a tuple with a list.   6

   c) Write a python program to add two matrices using list.   5

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