Reg No.:_____   Name:_____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
THIRD SEMESTER B.TECH DEGREE EXAMINATION, DECEMBER 2018

Course Code: EE207
Course Name: COMPUTER PROGRAMMING

Max. Marks: 100   Duration: 3 Hours

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

1	What is a compiler? How does it differ from an interpreter?	(5)
2	An electricity company charges people based on the number of units used. Input **the number of units and calculate the bill amount** and print using C program	(5)

No. of units   Rate/amount
Up to 100 units   Rs. 1.80/-unit
Otherwise   Rs. 3.50/- extra per unit

3	Write a short note on array declaration and array initialization	(5)
4	Write a C program to find factorial of given number using recursive function.	(5)
5	Differentiate between structure and union with example.	(5)
6	Write a C program to swap the values of two variables using pointer.	(5)
7	Write a C program to read data from the keyboard, write it to a file, read the same data from the file and display on the screen.	(5)
8	Write a Python program to check whether a number is prime or not	(5)

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

9	a)	Differentiate between ++ i and i ++ with the help of examples.	(4)
	b)	Explain different data types in C with examples.	(6)
10		Write a C program to print prime numbers up to N. Draw flow chart also.	(10)
11		To initiate a group activity, a teacher decided to group the whole class of strength 60 into 6 groups according to the following rule	(10)

Reminder (R)	Group
0	I
1	II
2	III
3	IV
4	V
5	Vi

Where R is the reminder when a student divides his/her Roll No. by 6. Write a
C program to list group members of each group.

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

12		Write a C program to multiply two matrices	(10)
13	a)	What is meant by recursive function? Give example?	(5)
	b)	Explain different string handling function in C with examples?	(5)
14		What is storage classes in C and explain different storage classes in C with example?	(10)

PART D
Answer any twofull questions, each carries 10 marks.

15	a)	Write a C program to find factorial of a number using pointer	(6)
	b)	What are the advantages of using pointers in C	(4)
16	a)	How does a structure differ from an array in C?	(5)
	b)	How is append mode different from write mode regarding files in C?	(5)
17	a)	Write a Python program to read time in sec and convert that to hr:min:sec.	(5)
	b)	Write a Python program to check whether the given year is leap year or not.	(5)

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