

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Third Semester B.Tech Degree (S,FE) Examination January 2022 (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

- | | | |
|---|---|-----|
| 1 | Differentiate between high level, low level and assembly languages. | (5) |
| 2 | Write the output of the program:
<pre>main()
{
int a=15,b=10,c,d,i;
for (i=0;i<5;i++)
{
c=++a-b;
d=++b + a++;
printf("c=%d,d=%d\n",c,d);
}}</pre> | (5) |
| 3 | How a two dimensional array is initialized. Also explain how to initialize a string variable with example. | (5) |
| 4 | With suitable example, explain the following terms: i) Function definition ii) Function prototype iii) Function call iv) Formal Argument v) Actual Argument | (5) |
| 5 | Discuss the differences and similarities between structure and union. | (5) |
| 6 | What are pointers? Why they are used? Illustrate with example. | (5) |
| 7 | Explain putc and getc functions using example. Write its syntax also. | (5) |
| 8 | What are the standard data types in Python? Explain any three. | (5) |

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

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|---|--|-----|
| 9 | a) What are the different data types in C? Explain two user defined data types. | (5) |
| | b) Given the three sides of triangle. Write algorithm and flow chart to check whether it is an isosceles triangle. | (5) |

- 10 a) Write a C program to compute the sum of n terms of the series: $1 + \frac{2}{3!} + \frac{3}{5!} + \frac{4}{7!} + \dots$ (5)
- b) What is nested if statement. Write an example program using nested if. (5)
- 11 Write a C program to print palindrome numbers between 1 and 500. Draw its flowchart also. (10)

PART C

Answer any two full questions, each carries 10 marks.

- 12 a) Write a C program to find out average of given n numbers and how many of the numbers are above average and how many are below average. (5)
- b) Write a program to find number of small letters and capital letters in a string. (5)
- 13 a) What is storage classes in C and explain two storage classes in C with example? (5)
- b) List the string handling functions. Explain any three with example. (5)
- 14 a) Write a C program to read a matrix and print this matrix using functions. (5)
- b) Write a recursive function to find factorial of a number. Use this function to calculate nCr . (5)

PART D

Answer any two full questions, each carries 10 marks.

- 15 a) Write a C program to find factorial of a number using pointer. (5)
- b) Write a C program to sort the array elements using pointer. (5)
- 16 Assume there are two files first.txt and second.txt. Write a C program to merge the content of two files into a new file third.txt (10)
- 17 a) How the structure variables are initialized in C? Explain with example. (5)
- b) Write a python program to print odd numbers for a user provided range. (5)
