

C

Reg. No. :

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Question Paper Code: U2204**

B.E./B.Tech. DEGREE EXAMINATION, NOV 2022

Second Semester

Computer Science and Engineering

21UCS204- Programming using C

(Regulations 2021)

(Common to Computer science and Design)

Duration: Three hours

Maximum: 100 Marks

Answer All Questions

PART A - (5x 1 = 5 Marks)

- Which of the following is not a valid C variable name? CO1- U  
(a) int number;      (b) float rate;      (c) int variable\_count;      (d) int \$main;
- Which of the following looping statements end with a semicolon? CO2- U  
(a) While      (b) do while      (c) for      (d) None of these
- An array of pointers is same as \_\_\_\_\_ CO3- U  
(a) pointers to array      (b) pointers to pointers  
(c) pointers to function      (d) pointers to structure
- The Default parameter passing mechanism is called as CO4- U  
(a) Call by value      (b) Call by Reference      (c) Call by Address      (d) Call by Name
- Which of the following functions are used to write an integer to a file? CO5- U  
(a) fprintf()      (b) putw()      (c) putc()      (d) puts()

PART – B (5 x 3= 15Marks)

- Differentiate character constant and string constant with example. CO1- U
- What is the difference between for and while statement? CO2- U
- Write any four features of an array. CO3- U

9. What is meant by recursion? CO4- U
10. Write the two ways of accessing file in C. CO5- U

PART – C (5 x 16= 80 Marks)

11. (a) Write a C program to compute the volume of cylinder with diameter d and height h and print diameter, height and the volume. CO1-App (16)
- Or
- (b) Write a C program to evaluate the net salary of an employee  $\xi$  following following CO1-App (16)
- Constraints:
- DA : 12% of Basic salary
- HRA : 20% of Basic salary
- TA : 15% of Basic salary
- Tax cuts – a) PF :14% of Basic salary and b) IT: 15% of Basic salary
- Net Salary = Basic Salary + DA + HRA + TA– (PF + IT)
12. (a) Describe the different forms of if statement in C .Write a C Program using if then else ladder condition. CO2-App (16)
- Or
- (b) Explain in detail about ‘for’ statement with example and also discuss flow of execution. CO2-U (16)
13. (a) Develop a C Program to calculate the average marks of the class using Arrays? CO3-App (16)
- Or
- (b) Develop a C Program to Subtraction of two Matrix Using two-dimensional Arrays? CO3-App (16)
14. (a) Explain in detail about structure with example? CO5-U (16)
- Or
- (b) Explain in detail about function prototype with example? CO4-U (16)
15. (a) Write a program to illustrate the use of Random access file? CO6-App (16)
- Or
- (b) Write a program to illustrate the use of Sequential access file? CO6-App (16)