

2017**BCA 1st Semester Examination****C PROGRAMMING LAB.****PAPER—1196 (Set-II)****(Practical)***Full Marks : 100**Time : 3 Hours**The figures in the right-hand margin indicate full marks.**Candidates are required to give their answers in their own words as far as practicable.**Illustrate the answers wherever necessary.*Answer any *two* questions through lottery basis.

2×25

1. Write a C program to count the number of evens and odd numbers in an array.
2. Find the factors of a numbers and print them in ascending order.
3. Write a C program to calculate first 10 non-Fibonacci numbers.
4. Write a C program to reverse a number and print sum of its digits.
5. Write a C program to print the Pascal triangle :

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      #  
     # #  
    # # #  
   # # # #
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3. Write a C program whether a matrix is symmetric or not.

(Turn Over)

7. Write a C program to sorting the element of an array in descending order.
8. Write a C program to count the no. of occurrence of vowels in a given string.
9. Write a C program to find product of the first 10 natural numbers.
10. Write a C program to check a number is prime or not.
11. Write a C program to compute :

$$1 + \frac{2^2}{2} + \frac{3^3}{3} + \frac{4^4}{4} + \dots + \frac{n^n}{n}$$

12. Write a C program to convert a binary number to its octal number equivalent.
13. Write a C program to reverse a string.
14. Write a C program to print the different characters in a string and their number of occurrences in the string side by side.
15. Write a C program to convert a given lower-case string to upper-case string.
16. Write a C program to concatenate two strings without using the strcat() function.
17. Write a C program to count number of vowels and consonant in a given string.
18. Write a C program to print all the leap years between 1000 to 2018.

Viva — 15 Marks

PNB — 05 Marks

Internal Assessment — 30 Marks