

**FIRST YEAR B. C. A. EXAMINATION**

**MARCH / APRIL – 2016**

**PAPER – 103: INTRODUCTION TO PROGRAMMING LANGUAGE**

**TIME: 3 HOUR**

**[TOTAL MARKS: 100]**

**CODE 805.2**

**Q-1 Answer the following questions. [20]**

1. Explain Algorithm with example. [5]
2. Explain the terms compiler and interpreter. [5]
3. Explain basic structure of 'C' language. [5]
4. Distinguish between the following pairs: [5]
  - a. Main() and void main(void)
  - b. int main() and void main()

**OR**

**Q-1 Answer the following questions. [20]**

1. Explain Flowchart with example. [5]
2. Explain the terms Editor, Translator, Assembler. [5]
3. What is data type? Explain data types available in C. [5]
4. What is Programming Language? Explain with its type. [5]

**Q-2 Answer the following questions. [20]**

1. What is looping? Give the difference between entry control & exit control loop. [5]
2. Explain formatted input and output statement with example. [5]
3. Write a Program to prepare student mark sheet that contain roll no, name. And enter six subject mark and print roll no, name, total, percentage with The use of Nested if. [10]

**OR**

**Q-2 Answer the following questions. [20]**

1. Explain Else if ladder with example. [10]
2. Short note on operators available in C. [5]
3. Explain Goto and Break statement with example. [5]

**Q-3 Answer the following questions. [20]**

1. What is array? Explain types of array. How we can initialize 1D & 2D array? Explain it with example. [10]
2. Write a C Program for to find a no. of vowels and no. of characters. [10]

**OR**

**Q-3 Answer the following questions. [20]**

1. What is Character array? How we can create & initialize character array? [5]
2. What is searching? Explain linear search with example. [5]
3. Write any 5 built in functions with their syntax, meaning and example. [10]

**Q-4 Answer the following questions. [20]**

1. Differentiate: Pointer to Array v/s Array to pointer. [5]
2. What is function? What is user defined function? What is function prototype? Give an example [10]
3. Explain about declaration of storage class. [5]

**OR**

**Q-4 Answer the following questions. [20]**

1. What do you mean by recursion function? Explain with example. [10]
2. Explain the terms call by value and call by reference. [5]
3. Differentiate: Static memory allocation and Dynamic memory allocation. [5]

**Q-5 Answer the following questions. [20]**

1. What is structure? Explain with example how to create a (a) simple structure (b) Structure within structure. [10]
2. Explain the following functions with example:  
(a) fseek() (b) fscanf() (c) fprintf() (d) fgetc() (e) fputs() [10]

**OR**

**Q-5 Answer the following questions. [20]**

1. Give the difference between Structure and Union [5]
2. What is nested structure? Explain with suitable example. [10]
3. What is file? Explain defining, opening and closing file. [5]