## Paper Code: 21301 F-401

## B. C. A. (First Semester) **EXAMINATION, 2017-18**

(New Course)

Paper No. BCA-101-N

## COMPUTER FUNDAMENTAL AND PROGRAMMING

Time: Three Hours ] [ Maximum Marks: 70

Note: Attempt any five questions. All questions carry equal marks.

- Define Computer. Explain the characteristics of Computer.
  - Define the term 'Memory'. Differentiate between primary and secondary memories.
- What is ASCII code? Write a program to convert numbers from 1-50 to its equivalent ASCII value.
  - Compare and contrast between Low level language and High level language.

P. T. O. C-102

http://www.mjpruonline.com

http://www.mjpruonline.com

- What is Data Representation? How to represent integers and floating point numbers?
  - (b) Convert the following:
    - (i)  $(100101)_2$  to  $(X)_{10}$
    - (ii)  $(928)_{10}$  to(X)<sub>8</sub>
    - (iii)  $(37.50)_{10}$  to  $(X)_2$
    - (iv)  $(E7B5)_{16}$  to  $(X)_{10}$
    - (v)  $(456)_8$  to  $(X)_{10}$
    - (vi) (54398)<sub>10</sub> to (X)<sub>16</sub>
    - (vii) (1001.1010)<sub>2</sub> to (X)<sub>10</sub>
- (a) Explain any five 'C' operators. Give suitable example for each.
  - (b) What is Flowchart ? Discuss the various symbols used in Flowchart. Write an algorithm and flowchart to find maximum number between two numbers.

http://www.mjpruonline.com

- (a) What do you understand by Debugging and testing of programs?
  - (b) Define Preprocessor. Compare and contract Compiler and Interpreter.
- (a) Describe Control Flow Statements with suitable examples.
  - What is Data Type? Discuss its classification with proper example.

C 102 http://www.mjpruonline.com [3]

- (a) Define Array. Discuss the various operations associated with an array.
  - (b) Describe the types of Sorting and Searching with suitable example.
- (a) Write a program to check whether an entered number is Palindrome or not.
  - (b) Write a program to perform addition of two 2 × 2 matrices.

http://www.mjpruonline.com

http://www.mjpruonline.com Whatsapp @ 9300930012 Your old paper & get 10/-पुराने पेपर्स भेजे और 10 रुपये पार्ये, Paytm or Google Pay से

21301