www.FirstRanker.com

MCA I Semester Supplementary Examinations June/July 2018 **INTRODUCTION TO PROBLEM SOLVING & PROGRAMMING**

(For students admitted in 2017 only)

Time: 3 hours

Answer all the questions

1 Explain various steps involved in a systematic implementation of algorithms in top-down approach.

OR

- 2 Write a Pascal implementation of summing up a set of n numbers and return the resultant sum.
- 3 Write the Pascal implementation for generating pseudo-random numbers.

OR

- 4 Develop an algorithm to raise a number 'n' to a large power 'p'.
- 5 What do you mean by typecasting? Explain the difference between while and do-while loop with an example.

OR

- Explain different relational operators. Define a variable and list out the rules for formulating variable 6 names.
- 7 What is recursion? Explain the declaration of a function with an example.

OR

- 8 Define and declare a union. List out the differences between structures and unions.
- What is the difference between malloc and calloc functions? Explain the concepts of arrays of pointers 9 with an example.

ÒR

Define a file. Write a program to demonstrate the opening and closing of a file. 10 n. KNNN-FIF

www.FirstRanker.com



Max. Marks: 60