

S.D.E.

M.C.A. SEM -II : SUMMER - 2018

SUBJECT : COMPREHENSIVE EXAMINATION (CONVENTIONAL TYPE)

Day : **Wednesday**
Date : **06/06/2018**

S-2018- 4642

Time : **02.00 P.M. TO 05.00 P.M.**
Max. Marks : 100

N.B.:

- 1) Attempt **ANY FIVE** questions.
 - 2) Figures to the right indicate **FULL** marks.
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- Q.1** Consider the following sequence of page references. [20]
7, 0, 1, 2, 0, 3, 0, 4, 2, 3, 0, 3, 2, 1, 2, 0, 1, 7, 0, 1
How many page faults occur by applying FIFO and LRU replacement algorithms?
- Q.2** Define recursion. Write an algorithm to convert decimal number to binary. [20]
Further trace it to convert 425 decimal number to binary number.
- Q.3** Define process. Describe working of system calls for the process control. [20]
- Q.4** Define software. Explain spiral model of SDLC. [20]
- Q.5** Explain TCP / IP model of computer network. [20]
- Q.6** a) Explain different data integrity constraints with example. [10]
b) Describe queue as ADT. Implement it using C. [10]
- Q.7** a) Explain iterative constructs available in C language. [10]
b) Differentiate between direct and indirect address instructions with example. [10]
- Q.8** Define binary tree. Explain traversal methods of tree. [20]

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