CDOE

MASTER OF COMPUTER APPLICATIONS

M. C. A. Sem-VI : WINTER :- 2021

SUBJECT: COMPREHENSIVE EXAMINATION (CONVENTIONAL TYPE)

Day : Tuesday
Date 22-02-2022

W-5391-2021

Time : 02:00 PM-05:00 PM
Max. Marks: 100

N.B.:

1) Answer **ANY FIVE** questions.
2) Figure of the right indicates **FULL** marks.

Q.1 **a)** Write a note on asymptotic notations for complexity. **(10)**

b) Write an algorithm to remove duplicates from an array of size 10. **(10)**

Q.2 Explain following scheduling algorithms- **(20)**

i) Round Robin
ii) Shortest Job First

Q.3 Draw flowchart and write a C Program to print Fibonacci series upto n terms. **(20)**

Q.4 Write recursive algorithms for Binary tree traversal (Inorder, preorder, post order) **(20)**

Q.5 Explain following terms- **(20)**

a) Flip flops
b) Integrated circuits
c) Decoders
d) Multiplexers
e) Registers

Q.6 Write a note on OSI Model layers, their functions and applications with suitable diagram. **(20)**

Q.7 With respect to SDLC explain process, advantages and disadvantages of spiral model. **(20)**

Q.8 Explain the concept of Normalization and functional dependencies of relational databases. **(20)**

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