Paper / Subject Code: 59201 / Algorithm & Complexity 24/05/19

ME comp sem I CBCS FH2019

Q.P.Code: 39070

(3 Hours) [Total Marks : 80]

Please check whether you have got the right question paper.

N.B. (1) Question No. 1 is compulsory
(2) Attempt any three out of remaining five questions
(3) Make suitable assumptions wherever necessary and justify it.
(4) Figures to the right indicate full marks

Q1		Write short notes on	20
	(i)	Recursion tree method	
	(ii)	Line segment properties	
	(iii)	Monte Carlo algorithm	
	(iv)	Greatest common divisor	
Q2	(a)	Explain Amortized analysis: The accounting method	10
	(b)	Explain the substitution method with an example	10
Q3	(a)	What is greedy strategy? Explain with an example how it is used in Huffman Coding	10
	(b)	Explain Bellman Ford algorithm in detail	10
Q4	(a)	Write and explain Flyod Warshall algorithm in detail where can it be used	10
	(b)	Explain Maximum Bipartite matching in detail.	10
Q5	(a)	Explain Graham Scan Algorithm for convex hull problem	10
	(b)	Explain Mesh algorithm and its application	10
Q6	(a)	What is LCS. Write the algorithm to find LCS. Determine the LCS of <0100110101> and <10101101>	10
	(b)	What do you understand by NP complete? Explain. Is travelling salesperson NP complete	10

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