

JK LAKSHMIPAT UNIVERSITY, JAIPUR

INSTITUTE OF ENGINEERING AND TECHNOLOGY

End Term Examination (BackLog), Sep 2019

B. Tech/ M. Tech (as applicable) in ..CSE...Engineering, Semester VI

Roll No.....

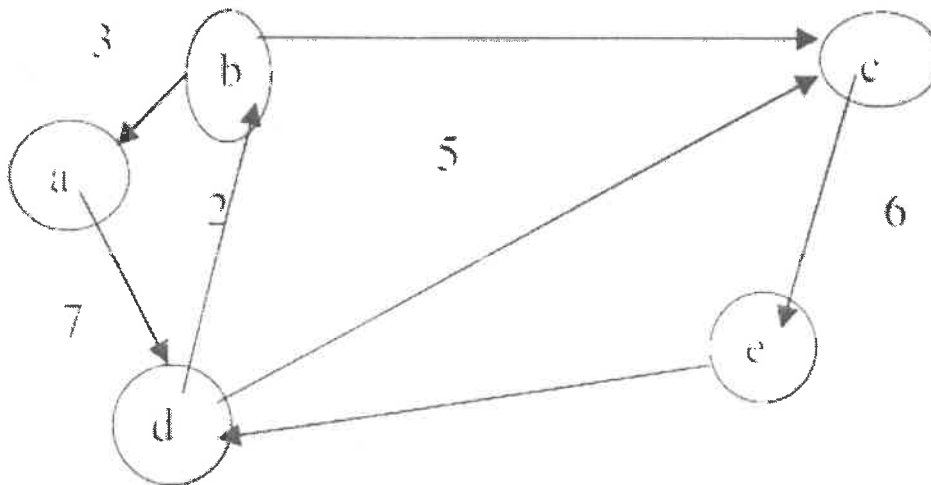
COURSE CODE: CSE602

Time: 1.5 hours

Max. Marks: 30

COURSE TITLE: Design & Analysis of Algorithm

- Q.1 Does an N Queens problem with 3X 3 board have a solution? How many solutions are there for the 8 queens problem? Enumerate each solution. 10
- Q.2 Solve the following instance of the single source shortest path problem with vertex 'a' as the source. Define Algorithm for the same . 10



- Q.3 Solve the all-pairs shortest path problem for the digraph with the weight matrix given below. Discuss the algorithm with its complexity. 10

	A	B	C	D
A	0	∞	∞	3
B	2	0	∞	∞
C	∞	7	0	1
D	6	∞	∞	0