

**AHSANULLAH UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

Course No: CSE4125

Course Title: Distributed Database Systems

Spring 2019 | Quiz – 4 | Marks 20 | Time: 40 Minutes | Set – A | ID =

	Consider the following relations -																																																																											
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1.	Complete the following Database Profiles :-												4																																																															
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2.	We want to perform the query Q: (R $\mathbf{JN}_{a=q}$ S) UN (T $\mathbf{JN}_{x=q}$ S). Draw the optimization graph for the query.												2																																																															
3.	Estimate the cardinality and size of the query of question 2.												6																																																															
4.	Find the total transmission cost of performing (R $\mathbf{JN}_{a=q}$ S) at Site 2 by: (a) using the semi-join program and (b) without using the semi-join program. Which one is the better solution? Semi-join has selectivity $\rho=0.1$												8																																																															