

Department of Electrical Engineering
Final – Term Assignment Spring 2020

Date: 25/06/2020

Course Details

Course Title: Communication System Design and Service Integration. **Module:** PhD
Instructor: Dr. Shahid Latif **Total Marks:** 50

Student Details

Name: _____ **Student ID:** _____

Note: Attempt all of the following questions.

Q1.	Referring to the article “ Information System Integration ” by Wilhelm Hasselbring. Discuss in your own words the Inter-organizational process for vertical fragmentation of organizational units and Horizontal integration to support business processes. Do you agree or not with the conclusion of this article, give your comments.	Marks 20
Q2.	Referring to An introduction to Service Integration and Management and ITIL , summarize how “Service Integration and Management” (SIAM) can be implemented in High-Level model. Covering its main principles and processes involved in its implementation.	Marks 10
Q3.	Integrated radio communication systems based on IT research article deals with <i>complex solutions of radio communication systems for special application especially in air traffic control ATC and integrated rescue systems IRS area.</i> Determine from this paper how this technology integration will help in suitable remote monitoring and control systems?	Marks 10
Q4.	Concurrent Engineering (CE) is a method for managing the development of complex systems. CE is effective; but it requires a set of analytic tools and procedures to operationalize its concepts. Building on fundamental characteristics of complex systems and design decision-making, two principles have been proposed: (1) the ‘Iteration’ principle encapsulates the fact that there is an inherent, iterative nature to the design process. Iteration results in changes that must propagate through the design stages, requiring upstream rework; (2) the ‘Parallelism’ principle exploits the possibility of achieving shorter development times by performing multiple development stages in parallel or with some overlap (e.g. by sharing early preliminary upstream information with downstream stages. Discuss the pros and cons of the above statement by giving solid justifications for your arguments.	Marks 10