Subject	Management Information System		
Roll No.		Marks	60 Marks
Total No. of Questions	7	Duration	3 Hours
Total No. of printed pages	3	Date	19/04/2016

Note: Q1 is compulsory and solve any FOUR from the remaining SIX questions.

Q1) 20 Marks (Compulsory):

In the first years, Amazon intentionally kept its Web site systems separate from its orderful-fillment system. The separation was partly due to the fact that the programmers did not have the technical ability to connect them, and partly because the company wanted to improve security by keeping the order systems off the Web. By 1997, Amazon's sales had reached $148 million for the year. The big book database was being run on Digital Alpha servers. Applications were still custom written in 5 house. By early 2000, the company had over 100 separate database instances running on a variety of servers—handling terabytes of data. In 2000, Amazon decided to overhaul its entire system. The company spent $200 million on new applications, including analysis software from E.piphany, logistics from Manugistics, and a new DBMS from Oracle. The company also signed deals with SAS for data mining and analysis [Collett 2002]. But, one of its biggest deals was with Excelon for business-to-business integration systems. The system enables suppliers to communicate in real time, even if they do not have sophisticated IT departments. It provides a direct connection to Amazon's ERP system either through programming connections or through a Web browser [Konicki 2000]. About the same time (May 2000), Amazon inked a deal with HP to supply new servers and IT services [Goodridge and Nelson 2000]. The new systems ran the open-source Linux operating system. Already by the third quarter of 2001, Amazon was able to reduce its IT costs by 24 percent from the same quarter in 2000 [Collett 2002]. By 2004, the supply chain system at Amazon was a critical factor in its success. Jeffrey Wilke, Senior VP of worldwide operations, observed that "When we think about how we're going to grow our company, we focus on price, selection, and availability. All three depend critically on the supply chain" [Bacheldor 2004]. Almost the entire system was built from scratch, customized to Amazon's needs. When a customer places an order, the system immediately connects to the distribution centers, determines the best way to ship the product, and provides the details to the customer in under two minutes. The entire process is automatic. Dr. Russell Allgor moved from Bayer Chemical to Amazon and built an 800,000-equation computer model of the company's sprawling operation. When implemented, the goal of the model was to help accomplish almost everything from scheduling Christmas overtime to rerouting trucks in a snowstorm. Allgor's preliminary work focused on one of Amazon's most vexing problems: How to keep inventory at a minimum, while ensuring that when someone orders several products, they can be shipped in a single box, preferably from the warehouse — the company had six — that is nearest the customer [Hansell, 2001]. Dr. Allgor's analysis is simple, but heretical to Amazon veterans. Amazon should increase its holdings of best sellers and stop holding slow-selling titles. It would still sell these titles but order them after the customer does. Lyn Blake, a vice president who previously ran Amazon's book department and now oversees company relations with manufacturers, disagrees with this perspective. "I worry about the customer's perspective if we suddenly have a lot of items that are not available for quick delivery." Amazon's merchant and MarketPlace systems are powerful tools that enable smaller stores to sell their products

through Amazon's system. Amazon continually works to improve the connections on those systems. This system caused problems in 2001—the main issue was that the data on the merchant Web sites was being updated only once every eight hours. The merchant's link to Amazon's main database servers, and internal applications transfer the data onto the displayed page as requested. As customers purchased items, the inventory quantities were altered in the main servers, but the current totals were not transferred to the display pages until several hours later. Consequently, customers would be told that an item was in stock, even it had sold out several hours ago. To solve the problem, Amazon installed Excelon's ObjectStore database in 2002. The system functions as a cache management server, reducing the update times from eight hours down to two 6 minutes. Paul Kotas, engineering director for the Merchants@Group noted that "with the growth of this business, we needed a zero-latency solution" [Whiting 2002]. In 2003, Amazon added a simple object access protocol (SOAP) gateway so that retailers could easily build automated connections to the system. Data is passed as XML documents and automatically converted to Amazon's format [Babcock 2003]. One of the most successful technologies introduced by Amazon is the affinity list. When someone purchases an item, system makes recommendations based on similar items purchased by other customers. The system uses basic data mining and statistical tools to quickly run correlations and display the suggested products. Kaphan notes that "There was always a vision to make the service as useful as possible to each user and to take advantage of the ability of the computer to help analyze a lot of data to show people things they were most likely to be interested in" [Collett 2002]. The system also remembers every purchase made by a customer. So, the Amazon programmers created the Instant Order Update feature, that reminds customers if they have already purchased an item in their cart. Bezo notes that "Customers lead busy lives and cannot always remember if they've already purchased a particular item." He also observed that "When we launched Instant Order Update, we were able to measure with statistical significance that the feature slightly reduced sales. Good for customers? Definitely. Good for shareowners? Yes, in the long run" [2003 annual report]. Capital expenditures for software and Web site development are not cheap: $176 million, $146 million, and $128 million for 2010, 2009, and 2008 respectively (2010 Annual Report). But, in comparison, in 2010, net income tax provisions were $352 million.

a) Write a note on 'How Amazon strategically built the Information System'? (10 M)

b) Write the advantages of Instant order update feature developed by Amazon. (5M)

c) Why did Amazon create most of its own technology from scratch? (5 M)

Attempt Any FOUR from the Remaining SIX Questions

Q2) *Any two from (a) or (b) or (c)* —————— *(5x2) = 10 Marks*

a) Facebook has promoted the Free Basics and Digital equality concept in India recently. This campaign was suggesting to offer free access to certain Information websites for all citizens in india so that all the people can avail the facility of net surfing without any data charges. TRAI (Telecom Regulatory Authority of India) denied Facebook for the same. What according to you was the facebook's stratgy behind this?

b) Explain the difference between Data and Information.

c) Explain the applications of Near Field Communications and Augmented reality.

Q3) *Any two from (a) or (b) or (c)* ———————— *(5x2) = 10 Marks*

a) Write a note on Security Challenges in MIS.
b) Explain 'Operations support information systems and its types'
c) Explain the concepts 'Data Warehousing and Data Mining'.

Q4) *Any two from (a) or (b) or (c)* ———————— *(5x2) = 10 Marks*

a) Explain the need of information in the business.
b) Explain Conceptual and Probabilistic Information System.
c) Write a note on 'MIS in Hospitals'

Q5) *Any two from (a) or (b) or (c)* ———————— *(5x2) = 10 Marks*

a) Explain the applications of MIS in Hotel and Airlines Industry
b) What is System? Explain the characteristics of system.
c) Write a note on "Pivot Table and its applications'

Q6) *Any two from (a) or (b) or (c)* ———————— *(5x2) = 10 Marks*

a) Write a note on ' Improving Decision Making through MIS'
b) Explain in detail the steps involved in building/designing the information system.
c) Write a note on need of MIS in HR

Q7) *Any two from (a) or (b) or (c)* ———————— *(5x2) = 10 Marks*

a) Write a note on Ethical Issues in MIS.
b) How can business achieve competitive advantage through MIS?
c) Write a note on 'Hardware components in IT'.