

Name:	
Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, December 2018

Course: Information Technology Applications in Supply Chain

Semester: I

Programme: MBA (LSCM)

Course Code: DSIT7001

Time: 03 hrs.

Max. Marks: 100

Instructions:

SECTION A - Multiple Choice Questions

2*10 = 20

S. No.		Marks	CO
Q 1	<p>1. Which of these are part of Information systems</p> <ul style="list-style-type: none"> a. Android and SaaS Cloud Computing. b. Scanners , digitizers c. Web hosting and web connection d. Transaction processing systems, Learning management systems, 	2	CO-1
Q2	<p>2. In a company the following actions and processes have started taking place , Company is organized functionally with high degree of integration .Decisions are made through the integration of key functional areas i.e. sales , manufacturing and logistics . In such situation the company can be considered to be at the level of</p> <ul style="list-style-type: none"> a. Level I – Disconnected Processes b. Level II - Internal Integration c. Level III - Intercompany integration d. Level IV - Multi-enterprise integration 	2	CO-2
	<p>3. At the lowest level of information system the output of the systems are</p> <ul style="list-style-type: none"> a. Transaction or events b. Detailed reports , lists and summaries c. Summary transaction data d. Advanced analytical reports 	2	CO-2
	<p>4. Which of these is not a standard SAP module</p> <ul style="list-style-type: none"> a. Material Management b. Inventory Management c. Supply Chain Management d. Warehouse Management 	2	CO-3
	<p>5. The Bullwhip effect is -</p> <ul style="list-style-type: none"> a. Enhanced demand due to over planning at each level of demand chain b. Production variations due to absence of Information system c. Inventory variations due to demand effects of seasonality 	2	CO-4

	d. Inefficient supply due to demand fluctuations		
	6. Which are the prime elements of RM system a. Sales, Marketing , Service b. Sales , Customer , service c. Sales, Resource , service d. Sales , Relationship , Quality Management	2	CO-4
	7. Stage 3 of SCM evolution where silo walls come down; functional area come together a. Multiple dysfunctional Enterprise b. Integrated enterprise c. Semi Functional enterprise d. Extended enterprise	2	CO-2
	8. Which of these are not part of SCM module of ERP a. Demand Planning b. Supply Network Planning c. Production Planning d. Transportation planning and Vehicle Scheduling	2	CO-5
	9. Which are the most essential components of Information systems a. Data , software and servers b. Data , servers and Configuration c. Software , configuration and data management d. All of the above	2	CO-4
	10. Walmart is the example of which type of e-commerce a. B2B b. B2C c. C2C d. None of the above	2	CO-5

SECTION B : Short Answer Questions Total 20 Marks – 5 Marks each
Answer any 4 in max. 100 words , Answer should be precise **4*5 = 20**

Q 1	What exactly is an information system? How does it work? What are its management, organization, and technology components?	5	CO-4
Q2.	What are business processes? How are they related to information systems?	5	CO-1
Q3.	How do systems that link the enterprise improve organizational performance?	5	CO-1, CO-4
Q4.	Which features of organizations do managers need to know about to build and use information systems successfully? What is the impact of information systems on organizations?	5	CO-2

Q5.	What is IT infrastructure and what are its components?	5	CO-1
Q6.	What are the unique features of e-commerce, digital markets, and digital goods?	5	CO3,
SECTION-C : Descriptive type questions 30 Marks -10 Marks each , Attempt any 3 Questions out of given choices 3*10 = 30			
Q 1	Why are information systems so essential for running and managing a business today? • List and describe six reasons why information systems are so important for business today	10	CO-1, CO-3
Q 2	Enlist major business process modules prevailing in SAP , Describe each with functionalities handled by them .	10	CO 5
Q 3	Which are 4 pillars of comprehensive development for making a smart city , discuss each pillars with their components and their significance .	10	CO-1 CO-2
Q 4	Enlist IT infrastructure components needed to built a robust IT system , explain them with short description .	10	CO-4
SECTION-D 3*10 = 30			
Q	<p>Starbucks is the world’s largest specialty coffee retailer, with over 1,700 coffee shops in 55 countries. For years, Starbucks grew throughout the United States and internationally, opening franchises at an impressive rate. From 2002 to 2007 alone, the company tripled the number of stores it operated worldwide. Starbucks offers a unique experience: high-end specialty coffees and beverages, friendly and knowledgeable servers, and customer friendly coffee shops. This was a winning formula for many years and enabled Starbucks to charge premium prices. During the economic downturn beginning in 2008, profits plunged. Customers complained that the company had lost its hip, local feel and had become more like a fast-food chain. Many coffee drinkers went in search of cheaper alternatives from McDonald’s and Dunkin’ Donuts for their coffee fixes. Starbucks stock lost over 50 percent of its value by the end of 2008.</p> <p>Major changes were in order. Starbucks seized the opportunity to overhaul its business by using several different strategies simultaneously. First, the company has revamped its in-store technology and sought to integrate its business processes with wireless technology and the mobile digital platform. Also, rather than copy the practices of competitors, Starbucks pursued a more aggressive product differentiation strategy, intended to emphasize the high quality of their drinks and efficient and helpful customer service. At the same time, however, Starbucks also focused on becoming ‘lean’, like many of their competitors, eliminating inefficiency wherever possible. When Starbucks set out to improve its customer experience, it found that more than a third of its customers are active users of smartphones. The company set out to implement several features and improvements that would appeal to this segment of its customer base. First, Starbucks implemented a technology that allows customers to pay using a smartphone app. The app is integrated with the Starbucks Card system, which allows regular customers to pay with a pre-paid and rechargeable card at any Starbucks branch. When customers make a purchase using the app, a cashier scans a</p>	10 marks for each question	CO-1 CO-2 CO-3 CO-4 CO-5

bar code displayed on the phone, and the resulting sale is charged to the customer's Starbucks Card account. Customers report that paying using this app, available for all major smartphone operating systems, is much faster than traditional forms of payment. In its first 15 months of use, the Starbucks mobile payment system processed 42 million transactions. Many of Starbucks' most loyal customers regularly spend time using the free Wi-Fi wireless network offered in each store. A majority of these customers also use mobile devices to connect to the in-store Wi-Fi networks. Recognizing this, Starbucks launched what it calls the "Starbucks Digital Network," a portal designed specifically for mobile devices as opposed to traditional Web browsers. The site is optimized for all major smartphone operating systems (iOS, Android, and BlackBerry), and responds to the multi-touch capability of devices like the iPad. The Starbucks Digital Network site was developed in partnership with Yahoo and functions as a content portal. Starbucks customers using the site will receive free Wall Street Journal access, select free iTunes downloads, and a wide variety of other content. The site will integrate with Foursquare, a location-based social networking site for mobile devices. This arrangement will allow users to check in and receive award points using Starbucks' site. Because Starbucks has the most Foursquare check-ins of any company to date, this feature has been popular with customers. Rather than serve ads on the site, Starbucks has opted to offer the site free of advertising, hoping that striking deals with content providers will make it a profitable venture. Even if the Starbucks Digital Network is not highly profitable, analysts suggest that the site is an effective way for Starbucks to improve its relationship with its most valuable customers and a creative use of the mobile digital platform to enhance customer satisfaction.

In addition to revamping their business to better serve the needs of their mobile users, Starbucks has made a concerted effort to become more efficient, reduce waste, and use the time saved to provide better customer service. Starbucks set out to streamline the business processes used in each of its stores so that baristas do not need to bend down to scoop coffee, cutting down on idle time while waiting for coffee to drain, and finding ways to reduce the amount of time each employee spends making a drink. Starbucks created a 10 person "lean team" whose job is to travel the country visiting franchises and coaching them in lean techniques made famous by automaker Toyota's production system. Store labor costs Starbucks about \$2.5 billion, amounting to 24 percent of its annual revenue. If Starbucks is able to reduce the time each employee spends making a drink, the company can make more drinks with the same number of workers or with fewer workers. Alternatively, Starbucks could use this time savings to give baristas more time to interact with customers and hopefully improve the Starbucks experience. Wireless technology enhanced Starbucks' business process simplification effort. Starbucks district managers use the in-store wireless networks to run store operations and to connect to the company's private corporate network and systems. Starbucks district managers were equipped with Wi-Fi enabled laptops for this purpose. Before the in-store wireless networks were implemented, a district manager who oversaw around 10 stores had to visit each store, review its operations, develop a list of items on which to follow up, and then drive to a Starbucks regional office to file reports and send e-mail. Instead of running the business from cubicles in regional headquarters, Starbucks district managers can do most of their work sitting at a table in

one of the stores they oversee. The time saved from going back and forth to regional offices can be used to observe how employees are serving customers and improve their training. Implementing Wi-Fi technology enabled Starbucks to increase the in-store presence of district managers by 25 percent without adding any extra managers. In 2008 and 2009, the weakened economy forced Starbucks to close 900 stores, renegotiate some rents, cut prices on some of their big ticket items, and begin offering price-reduced specials, such as a breakfast sandwich and a drink for \$3.95. Cost reductions from procedural changes made it possible for Starbucks to offer these lower prices.

Major fast food chains already used these techniques. While some baristas have resisted the changes, and analysts were skeptical that the changes would take hold, Starbucks attributes much of its recent uptick in profits to its efforts to go lean. Starbucks CEO Howard Schultz said that “the majority of cost reductions we’ve achieved come from a new way of operating and serving our customers,” and also added that the time and money saved was also allowing the company to improve its customer engagement. By 2011, Starbucks had returned to profitability and continuing growth, with plans to open 500 new stores, in large part because of the success of each these changes.

1. Analyze Starbucks using the competitive forces and value chain models.
2. What is Starbucks’ business strategy? Assess the role played by technology in this business strategy.
3. How much has technology helped Starbucks compete? Explain your answer.