Time allowed: 2.5 Hours   Max Marks: 50

Roll No: _____

Instruction: Students are required to write Roll No on every page of the question paper, writing anything except the Roll No will be treated as **Unfair Means.** In case of rough work please use answer sheet.

Sections	No. of Questions to attempt	Marks	Marks
A	3 out of 5 (Short Questions)	5 Marks each	3*5 = 15
B	2 out of 3 (Long Questions)	10 Marks each	3*10 = 20
C	Compulsory Case Study	15 Marks	15
		Total Marks	50

SECTION A

Q1. "Cash is king and in many organizations, there is significant untapped opportunity to optimize working capital and improve cash flows. In order to optimize working capital throughout the supply chain, companies must address some important issues in supply chain management" Discuss?

Q2. Define the term ECR and give one example of a company in retail sector where ECR should be implemented?

Q3. Define Little's law? Also deliberate on the statement that, "Little's Law will work if the system is at the same level (not necessarily 0) at the beginning and at the end of the cycle, and if all the customers/Units(Products) that are in the system at the beginning of the cycle leave the system before the end of the cycle?

Q4. Assume that you are company where MTS format is used, deliberate as to what should be the driver of WTP in such company and what kind of supply chain should be used?

Q5. "The connections between industry activities within a chain can be described along a continuum extending from the market, characterized by "arm's-length" relationships, to hierarchical value chains illustrated through direct ownership of production processes. Between these two extremes are three network-style modes of governance: modular, relational, and captive." Differentiate among all the types of governance modes identified in the statement?

SECTION B

Q1. "Many ecommerce retailers are enjoying a robust holiday selling season even as some brick-and-mortar stores are seeing relatively flat season (Christmas) sales. To ensure continued growth and success, Internet retailers may want to challenge their businesses to improve in several areas in 2014." Kindly enumerate what could be the areas where Ecommerce retailers should focus on?

Q2. "CPFR is a management concept that deals with the entire value chain as one entity. The optimization occurs not only at the intersections between manufacturer and retailer and retailer and consumer, it seeks also potential between supplier and manufacturer". Considering a case of multi-brand retailer, describe the reasons and the process of implementing CPFR model there?

Q3.
A. The form of governance can change as a company evolves and matures, and governance patterns within an industry can vary from one stage of the chain to another. The dynamic nature of governance can be largely accounted for with three variables: the complexity of information that the manufacture of a product entails (design and process); the ability to codify or systematize the transfer of knowledge to suppliers; and the capabilities of existing suppliers to efficiently and reliably produce the product. If, one of these three variables changes, then value chain governance patterns tend to shift in predictable ways" Discuss?
Or

B. "Under ECR program implementation 'category management' is seen as an opportunity to manage the relationship between customers, retailers and suppliers where all three parties interact and a win-win-win situation is obtained" Define the process of category management as the tool to manage supply chain effectiveness?

SECTION C

CASE: Supply chain Issues in Retail Business

Introduction to retail business concept
A retail chain differs from other industries by nature of its number of locations. A conventional manufacturing industry has a production at a limited number of locations and sales being handled from a few more. However, a retail industry has sales from a large number of locations. If it is in the food and beverage business, you could say that its production is also being done at all locations. This means that material handling, production, sales and distribution as well as finance transactions are being conducted at all their stores. Each store requires an inventory control system, a Point of Sales system and an accounting system (maybe also a production system).
Major Procurement is conducted at the HO, Material Receipt is done at the Stores and Bill Passing and Bank Payments conducted at the HO. Some extent of local procurement is also sometimes being done at the Stores. Sales is an activity which is being done completely at the stores. Most of these activites are handled through a POS system. However, while a POS system handles sales satisfactorily, it is generally not geared up to manage inventory, consumption or requisitions for material.

Contrary to popular belief (even within the organisation), the problem for a Retail organisation is not the POS system. The problem is integration and accurate information flow and the issue goes beyond just the Consolidation of Sales figures, A POS was meant for entering sales tickets and printing them, which it does without too many problems. It was then extended to contain some inventory information at each location. It is not capable of becoming an inventory, sales and procurement management solution, which is what a lot of POS solutions attempted to do.

Business overview of Retail Client

The client is a food and beverage retail chain. Beverages are made at each store using a combination of ingredients while the food items are traded items, which are procured from a third party. The client is a very fast expanding chain with over 100 stores. The Stores are spread over a vast geographical location. 4 regional offices manage stores within their area and 4 warehouses manage supplies of consumables and capital items to the stores. All of these report to one centralised HO. For every region there is a Regional Office which manages the stores within its territory and one warehouse to supply consumables (not perishables or raw material) to the stores within a territory.

Problems:

1. Procurement is a centralised activity at the HO. Prices are negotiated with vendors for consumables and perishables, which are meant to be directly delivered to the stores. On confirmation from the stores the vendor bills are cleared. The confirmation of items and their quantity received at the stores was a very irregular activity. The HO did not want to depend only on the receipt document given by the vendor. HO also wanted details of items rejected due to quality problems. Often the vendor would deliver items to the stores, which were not ordered for and in quantities greater or lesser than specified. For Bill passing, the vendor would submit his Delivery notes, which could be different than the original purchase order. Stores normally sent their MRN by normal post or informally communicated through email. If all the stores did not send the MRN, vendor payment would get delayed.

2. Changes in Confirmed Purchase Orders was a regular activity. At the time of Bill passing finding the reference of the Purchase Order was very difficult, since PO's were primarily a manual process.

3. Requisition of material from Stores was done through verbal communication or through email. There was really no proper procedure of either estimating requirements or of raising the requisitions. As a result, stores would get stocked out of key ingredients.

4. Daily sales figures from the stores were received through SMS or by verbal communication or by email. Without a proper procedure, the sales figures were being received in a random manner. HO was unable to receive the Sales figures from all stores in any single day. Some stores would send their figures twice. Some stores would send it after 2 days and some would not send the sales figures at all. HO was never able to get proper and timely sales figures which was a major constraint in planning and MIS. Also only the consolidated sales figures were being received, so there was no way to do a timely sales breakup by products.

5. Stores would deposit the daily sales collections in a local branch of the organisation's main bank. They would then inform the HO of the deposited amount again through verbal communication or by email. The HO could view details of the amount deposited by each store through the Bank's EDI interface. The problem was that the amount deposited and the collection figures of the store would rarely, if ever, match. There were valid reasons for this. The stores would require to pay cash for local expenses which they would pay from the daily sales collections. However there was no way of informing the HO on a daily basis of these expenses.

6. Recording of Consumption in each store was simply not feasible. The POS would be able to keep details of opening stock of material. At the end of the day, a physical check of the material

would be done and the closing stock entered. For the kind of Raw material that the organisation used, the inaccuracy of this physical verification was high since the UOM of the material could be a bottle while the consumption was a few milliliters. They were unable to track the amount of raw material consumed against each sales product sold in the case of beverages. The discrepancies in the stock consumption between the stores were substantial even if their daily sales figures were roughly the same.

7. Price changes and promotional schemes were decided by the HO and the information was sent to the Stores. However, some stores would incorporate these changes immediately, some would do it a day later and some would end up not having received this information at all. Some stores would also express helplessness at being able to reprogram the POS system. In addition, the HO would sometimes send a revised price list with only product codes marked. However, the same item in one store would have a

different code from another store. A related problem to this was also that if the items had different codes for the same products, they could never be automatically consolidated in a single report as was required by the HO.

Q1. How would define the problem in terms of supply chain management? What was going on with POS system?

Q2. What do you recommend as solution to the problem? Please enumerate atleast two to three alternatives for the specified problems?

Q3. Do you that CPFR like concept can be recommended in this case? If yes, how would you do it and If, no give your remarks on that?