Student Exam No._____

GANPAT UNIVERSITY

B. Tech. Semester: III (EE/Civil/BM&I/ME/MC/EC/IT/CE) Engineering

Regular Examination November – December 2014

(2OS301)Supply Chain Management-Planning

Time: 3 Hours **Total Marks: 70**

Instruction: 1. Attempt **all** questions.

2. Figure to **right** indicate **full** marks of the question.

3. Answer to each section must be written in **separate** answer book.

4. Assume suitable data, if **necessary**.

5. Draw sketches whenever **required**.

Section-I

Que.-1	(a)	What are the phases involve in supply chain with example.	6
	(b)	Describe Asian Paint's Push/Pull views of supply chain management.	6

OR

Que.-1	(a)	Discuss the drivers of SCM.	6
	(b)	List and explain the three basic steps for achieving strategic fit.	6
Que.-2	(a)	Explain the Frame Work for supply chain drivers.	5
	(b)	Explain role of transportation in Supply Chain and Competitive Strategy.	6

OR

Que.-2	(a)	1. Justify: Out-bound transportation costs are higher than In-bound transportation. 2. Justify: The supply chain decision has a greater impact on success of the firm.	6
	(b)	Give difference between demand uncertainty and implied demand uncertainty. Also explain the implied uncertainty spectrum with example.	5
Que.-3	(a)	Write down objectives of supply chain management.	6
	(b)	Describe Supply chain for Dell computer. What decisions they have made to be successful in the PC market.	6

Section – II

Que.-4	(a)	Explain: Manufacturer storage with direct shipping and in-transit merge.	6
	(b)	Explain the factors influencing network design decisions.	6

OR

Que.-4 Draw Decision tree for the following problem. And Determine the present value of expected profit for Period 1 for spot market. 12

One thousand square feet of warehouse space is required for every 1,200 units of demand, and the current demand at Gati Logistics is for 120,000 units per year. The manager decides to use a multiplicative binomial representation of uncertainty for both demand and price. From one year to the next, demand may go up by 30 percent with a probability of 0.5 or go down by 30 percent with a probability of 0.5. The probabilities of the two outcomes are unchanged from one year to the next. The general manager can sign a three-year lease at a price of $1.2 per square foot per year. Warehouse space is currently available on the spot market for $1.00 per square foot per year. From one year to the next, spot prices for warehouse space may go up by 10 percent with probability 0.5 or go down by 10 percent with probability 0.5 according to a binomial process. The probabilities of the two outcomes are unchanged from one year to the next.

The general manager feels that prices of warehouse space and demand for the product fluctuate independently. Each unit Gati Logistics handles results in revenue of $1.35 and Gati Logistics is committed to handling all demand that arises. Gati Logistics uses a discount rate of $k = 0.3$ for each of the three years.

Que.-5 (a) Explain Gravity Methods for Location. 5

(b) Explain EOQ. 6

OR

Que.-5 (a) Explain the role of facility in a supply chain. 6

(b) Describe the basic principle of DCFs and how they can be used to compare stream of cash flows. 5

Que.-6 (a) Explain Plant Location with Single Sourcing and Plant Location with Multiple Sourcing. 6

(b) Distinguish between 'Push' and 'pull' view of SCM. 6

END OF PAPER