



## ITC Call for Arms Online Simulation Round (Phase 1)



**Round Duration:** 30 minutes | **Submit response by:** 2230 hours or (10:30 PM)

**Google response sheet link:** <https://goo.gl/forms/TyWg9bGQ8SAOI7UC2>

NutriNow Fresh Food Limited, a Nordic Biscuit manufacturer, is a new entrant in the Indian Biscuit Industry. With the Indian consumers moving towards a healthy eating revolution, there has been a recent spurt in the demand for nutritious quick foods. Looking to be a front-runner in servicing the swiftly evolving market demand, NutriNow has decided to launch a new brand of biscuits, 'Quickies'.

NutriNow's success story has largely been attributed to their unique Distributor-led model of operations. The approach sees NutriNow acting as a 'Franchisor' providing the biscuit making technique & recipe, while the sales and operations ownership comes from the 'Distributors'. These NutriNow distributors are responsible for ensuring all backward & forward integration thereby essentially taking over the complete value chain.

NutriNow has invited proposals for entry strategy from potential distributors across India. You are one such distributor. The entry strategy comprises of deciding two crucial resources in industrial space and logistical partner, that could get things rolling for NutriNow in India.

The Resources are as stated below

Industrial Space
A
B
C
D
E

Logistic Partners
L1
L2
L3
L4
L5

### PART – A: Procuring an Industrial Space

Under the proposal, all Distributors (Teams) are required to procure factories in two Industrial Spaces, each having a fixed number of factories, with varying capacity of production, as mentioned in the table below:

**Daily Capacity of Production** is measured in Biscuit Units, an industrial term for a common unit that allows comparison across Biscuit Types.

(For Eg: While a regular biscuit packet can be equivalent to 1 BU, a high-end biscuit, requiring more resources, could require 5 BU to produce 1 biscuit packet.) **For the scope of this Phase, assume that only one Biscuit Type shall be produced by the factories.**

Industrial Space	No. of Factories	Daily Capacity (In BU)	Minimum Investment
A	10%	100000	55 Cr
B	15%	80000	40 Cr
C	35%	60000	30 Cr
D	20%	40000	15 Cr
E	20%	20000	10 Cr

The proposal also requires that **promotional channels** are bought to **convert your potential capacity to realizable capacities**. Each Factory needs to be complemented with a **different** promotion channel. Let the world know about 'Quickies'.

Analyze the following table to select the promotional channels for that would yield optimal returns.

Promotion	Guaranteed Sales	Minimum Investment
F	70%	`10 Cr
G	50%	`5 Cr
H	40%	`3 Cr

You are required to use a pre-allocated budget of **`100 Crores**, to purchase the 2 factories (in different industrial spaces) and 2 corresponding promotional channels.

### **The Catch:**

Note that these bids for investment go to FMCG Industrial Authority of India (FIAI). This makes the knowledge of popularity of a region or a promotional channel, public. Hence, if a particular industrial space attracts more number of bids, the corresponding capacity of its factories starts to decrease as competitors enter the area. At the same time, if a region is less popular, competitors move away from it, increasing the permissible capacity in biscuit units.

The Catch also extends to Promotional Channels. While all channels are certain to witness an increase in sales beyond the guaranteed numbers, the quantum may differ, if competitors are attracted towards it.

## PART – B: Logistical Partner Conundrum

Once you make a decision about the Industrial Spaces where you wish to establish your two factories, you are required to match it with a decision of the Logistical Partner that optimizes your operations.

The following parameters stand crucial in selecting the logistic partners & industrial space combination that should yield best results. Each Industrial Space has a unique logistical partner that optimizes their operations.

You need to decide which combination will be the optimal for your entry strategy -

Particulars	L1	L2	L3	L4	L5
Spoilage of goods	7%	3%	5%	8%	6%
Time taken to deliver	8h	3h	4h	7h	3h
Commission cost (Fixed) in INR	135000	96000	237000	359800	405000
Commission cost (Variable) in INR	2/unit	400/kg	300/carton	2.5/unit	320/carton
Duration of Contract in years	5	1	3	5	3
Logistic Partner rating	3	4	3.5	4.2	3.8
Supervision Cost in INR (on hourly basis)	200	20	100	150	100

### Additional data points-

- Average Cost of Goods Sold per unit – ` 20
- 1 unit = 10g
- 1 carton = 100 units
- 2 supervisors accompany the goods in transit

### Annual FIAI Survey on Logistical Partners 2018

Logistic Partner rating (Less than or Equal to)	1	2	3	4	5
Trust benefit (% of variable cost)	-5%	0%	1%	4%	5%

**\*Trust benefit should be treated as a discount.**

### NutriNow Contracts and Agreements Policy

Duration of Contract in years	1	2	3	4	5
Discount (on Fixed Cost)	2%	5%	10%	15%	20%

### National Highways and Tolls Body of India (NHTBI) Data

No. of Tolls	L1	L2	L3	L4	L5
A	5	6	7	10	9
B	6	5	8	9	8
C	7	8	6	8	7
D	8	9	9	7	8
E	9	10	10	9	6

\*Fees/Toll – `500

Your task is now to select 2 logistic partner-factory combinations such that it minimizes your cost of operations.

#### Rules:

1. The Submission for Phase 1 answers needs to be made in the following Google Form <https://goo.gl/forms/TyWg9bGQ8SAOJ7UC2>
2. The Google Form will stop accepting responses at 22.30 hrs, or 10.30 PM, sharp. Responses received after that shall be null and void.
3. Any incorrect, infeasible or incoherent answers and allocation, will lead to disqualification.
4. In terms of evaluation, Part B is independent of Part A
5. The decisions of the moderators are final and binding on all participants.

All the Best!