QUESTIONS PAPERS FOR END TERM EXAMINATION

NOVEMBER-DECEMBER: 2019

MBA / EMBA/Ph.D

1ST & 3RD SEMESTER

QUESTION PAPERS FOR MBA (DSM) & EMBA END TERM EXAMINATION, NOVEMBER-DECEMBERMAY: 2019
(Semester – I & III)

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FIRST SEMESTER

MBA

END SEMESTER EXAMINATION

(Nov-2019)

MGT – 11 MANAGEMENT PROCESS & ORGANISATION BEHAVIOUR

Time: 3 Hours

Max. Marks : 60

Note :	Answer any five questions. All questions carry equal marks. Assume suitable missing data, if any.

Q1 Critically examine Herzberg's two factor theory of motivation. Make a comparision between the motivation theories propounded by Herzberg and Maslow. Which of these theories would you prefer in the Indian context? Give reasons.

Q2 Discuss the nature of learning. How does classical conditioning helps in learning the desired behavior?

Q3 Describe the process of Perception. State any three types of perceptual errors.

Q4 A large unit manufacturing electrical goods which have been known for its liberal personnel policies and fringe benefits is facing the problem of low productivity and high absenteeism. How should the management improve the organizational climate?

Q5 Case study:

Hiren Dasgupta, sales Manager of Fashion Fabrics, Eastern Region, did not find the performance of Harish Mastana, one of his sales representatives; upto the mark. On six separate occasions, Hiren personally discussed with Harish about his various problems, suggesting ways and means so that he might improve his sales performance. During the last conference, Hiren said, "Harish, I am not going to have to let you go if your sales are not upto quota this month".

Harish failed to meet his quota. Hiren could not bear with the situation and decided to go for further action. He wrote Harish a letter informing him of his dismissal. Three days later, Hiren received a call from Mr. K T Parekh, General Manager – Sales, " Hiren I want you to put Harish Mastana back on the payroll immediately. You know he is the nephew of Mill Mazdoor Union Presedent" " O .K." replied Hiren, " I will see that its done ".

a. What are the authority – power- responsibility relationship in this case ?

b. What could be the possible impact of these relationships on the functioning of the company ?

Q6 Elucidate the contribution of various disciplines in the field of organisatinal behavior in detail.

Q7 How do you feel about having a manager's responsibility in todays world characterized by uncertaininty, ambiguity and sudden changes or threats from the environment? Describe some skills and qualities that are important to managers under these conditions.

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First Semester

END- SEMESTER EXAMINATION **Nov. -2019**

MGT-12 Financial and Cost Accounting

Time: 3:00 Hours *Max. Marks: 60*

Note: Answer all questions. All questions carry equal marks.

Ques:1 Following figures are extracted from the records of a Co. for the year 2015-16.

Direct materials: Rs 60,000
Direct wages: Rs 50,000
Works Overhead: Rs 30,000
Admin Overheads: Rs 33,600
Selling Overhead: Rs 22,400
Distribution Overheads: Rs 14,000
Profit: Rs 52,500

One material has been manufactured and supplied to Mr. X, in 2016-17 for which following expenses were incurred:

Direct Material: Rs 4000

Direct Wages: Rs 2000

In 2016-17 works overhead was increased by 20%, distribution overhead had been decreased by 10% and selling and admin overhead each were increased by 12.5%.

At what price the above supply is to be billed to Mr. X so as to earn the same rate of profit on selling price as earn in 2015-16. Works overhead are to be calculated on the basis of direct labour while other overheads are to be calculated on the basis of works cost.

Ques:2(a) Compute Total Assets to Debt ratio from the following information.

Share Capital: 12,00,000
Reserves & Surplus: 8,00,000
Long-term Borrowings: 25,00,000
Long-term Provisions: 5,00,000
Current Liabilities: 10,00,000

(b) From the following details, calculate Trade receivables turnover ratio.

Total sales for the year (Net): Rs 1,75,000
Cash Sales (Net): 20% of total net sales
Sales return-out of credit sales: Rs 10,000
Sundry Debtors:
Opening Balance: Rs 8,000
Closing Balance: Rs 12,000

Ques:3 Prepare purchases and sales books from the following transactions of Kalyan Silks, Kochi, Kerala given for April, 2018 and post the totals in the ledger:

2018

April 1: Purchase from Ram Prasad, Chennai:
100 meters silk@ Rs400 per metre
75 meters Velvet @ Rs 150 per metre
Plus IGST @ 12%

April 10: Sold to Ratiram, Ahmedabad:
60 meters silk@ Rs 500 per metre
10 meters velvet @ Rs 200 per metre
Plus IGST @ 12 %

April 12: Sold to Rama Swami, Kochi:
10 meters silk @ Rs 550 per metre
10 meters velvet @ 200 per metre
Charge CGST & SGST @ 6 % each.

April 18: Roop Naryan and Sons, Kochi purchase from us:
10 meters silk @ Rs 550 per metre
5 meters velvet @ 200 per metre
Charge CGST & SGST @ 6 % each.
Allowed Trade Discount @ 10%

April 22: Purchase from Manmohan Lal, Varanasi:
Shirting Cloth Rs 10,000
Sarees Rs 60,000
Received trade discount 10%, IGST @ 12%

April 23 Sold to Brijmohan and Brothers, Mathura:
Shirting Cloth Rs 7,000
Sarees Rs 25,000
Charged IGST @ 12%

Ques: 4 On 1st April, 2014, X Ltd. Purchased a machinery for Rs, 12,00,000. On 1st Oct,2016, a part of the machinery purchased on 1st April 2014 for Rs 80,000 was sold for Rs 45,000 and a new machinery at a cost of Rs1,58,000 was purchased and installed on the same day. The company has followed WDV method of depreciation @ 10% p.a. Show the necessary ledger accounts if:

(A) Provision for depreciation account is maintained.
(B) Provision for depreciation account in not maintained.

Ques:5 (A) Who are the users of financial reports?
(B) Differentiate between cost accounting and financial accounting.

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I SEMESTER

MBA

END SEMESTER EXAMINATION

Nov- Dec, 2019

PAPER CODE: MGT-13

TITLE OF PAPER: Marketing Management

Time: 3:00 Hours

Max. Marls: 60

Note: Attempt any Five questions. All questions carry equal marks. Assume suitable missing data, if any.

1. Attempt any three of the following:

   I) Differentiate between "market driven and market driving organizations" by giving suitable examples.

   II) Why do we consider packaging as fifth 'P' of marketing?

   III) Define 'marketing myopia' and summarizes its relationships with 'marketing concept'.

   IV) What are the major challenges in adoption and implementation of green marketing?

2. The existing size of air purifier market in India is expected to be around 200-250 crores. The market is dominated by three major brands: Blue Star, Eureka Forbs and Kent. In addition to that, around sixty brands are present in unorganized category. All the brands are collectively making huge investments in educating the customers, promotion and focus on bringing the best technology. In light of the above facts:

   I) Identify the segments that you would like to use for this product.

   II) Develop a suitable promotional mix for an unorganized player operating in this category with estimated budget of ten lakhs. You are free to make suitable assumptions.

3. Explain the concept of pricing threshold. For each of the following category, should a marketer use "skimming or penetration" strategy? Justify your answer by giving suitable examples.

   I). An electric blanket

   II). Eco friendly Bamboo Toothbrush with charcoal-infused Nylon Bristles

4. What are the phases of Product Life Cycle (PLC)? In which stage of PLC, would you like to keep: a self driving car, an electric car and a diesel car? Justify your answer in each case.

5. How does an effective and sound distribution provide a long term sustainable competitive advantage to a firm? Why do conflicts arise among channels members of a firm (at vertical, horizontal and multi-channel level)?

6. "The complexity of doing business has grown multi-folds in recent times". In light of the above statement, explain how the marketing environment is affecting firms operating in automobile and retail sector?

Q5. Attempt any TWO questions out of the following:

(a) The electricity utilities charges different prices for electricity in peak periods and off peak periods. Are they justified in charging different prices? What pricing strategy do they follow? Critically examine. [6]

(b) Explain the relationship between Price, elasticity and MR using calculus. Using the relation between price, elasticity and MR, calculate price that should be charged by a profit maximizing monopolist when price elasticity of demand = (-) 2 and MC = Rs. 10/unit. [3+3]

(c) Can a monopolist incur losses? Explain using diagram. Also explain the concept of excess capacity. [3+3]

END

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FIRST SEMESTER   **MBA**

END SEMESTER EXAMINATION   *November- 2019*

MGT-14 MANAGERIAL ECONOMICS

Time: 3:00 Hours   *Max. Marks: 60*

Note: All questions are compulsory. All questions carry equal Marks. Assume suitable missing data, if any.

Q1. Adapted from articles in newspapers, India Today, Livemint and Economic Times, answer the questions that follow:

Profits of Vodafone Idea and Bharti Airtel have been hit and some rivals have gone out of business since Reliance Industries' Jio Infocomm unleashed a fierce price war when it entered India's crowded telecoms market in 2016 with free calling and cut-price data.

Competition levels in the telecom sector are set to ease significantly next year and the industry blended average revenue per user (ARPU) likely to recover some lost ground with Reliance Jio slated to pursue a less aggressive pricing strategy in calendar 2019, global ratings agency, Fitch said.

Reliance Jio's disruptive pricing since its entry more than two years ago forced the older carriers to match rates to hold on to customers, galvanising consumption of voice and data services. Fringe players that couldn't withstand the brutal price wars exited and the industry consolidated down to three large private players–Vodafone Idea and Bharti Airtel among the older ones and Jio – making it an ideal market situation for pricing power to return over time.

Vodafone idea, Bharti Airtel and Reliance Jio accounts for over 90% of the revenue market share. Yet, the industry is suffering with losses of more than ₹40000crore. Recently, Reliance Jio Infocomm Ltd has raised basic monthly tariff plans to account for interconnect usage charges (IUC) that the telecom operator has to incur for calls made to rival networks.

Analysts said the price rise bodes well for Bharti Airtel and Vodafone Idea which have been complaining that current tariffs are unsustainable and price repair must happen in the sector.

The rival operators have still not increased their tariffs!

Considering the developments as mentioned in the above case, answer the following:

(a) Which market structure is represented by Telecom sector in India? Name one most striking feature of this market structure highlighted in above case. [2]

(b) Which behaviour of Airtel and Vodafone in retaliation to the price hike by Reliance Jio is highlighted in above case? Explain the impact of this behaviour using suitable market structure model. [4]

(c) What strategic choices are available to Vodafone and Airtel, on one hand; and Reliance Jio, on the other hand to decide whether they should compete or informally collude among themselves? Explain with the help of Game Theory. [6]

Q2. Attempt any TWO questions out of the following:

(a) A decline in price of Xbox 360 game consoles increases the demand for video games and decreases the demand for PlayStation3 game consoles. Show the impact on the consumer's purchase pattern for the two consoles using indifference curve analysis. Discuss the nature of the two goods. [6]

(b) If price of good Y is Re. 1 per unit and that of good X is Rs. 2 per unit and money income is Rs. 20.

i. Draw budget line
ii. Calculate the slope of budget line
iii. Write budget equation
iv. Show and explain consumer's equilibrium. On this budget line, what is the slope of indifference curve at the point of equilibrium? [1+1+1+3=6]

(c) Calculate cross price elasticity of demand between

(i) Inkpen and ballpen
(ii) Inkpen and ink

Good	Before		After	
	Price (Rs/Unit)	Quantity (unit/month)	Price (Rs/Unit)	Quantity (unit/month)
Inkpen (Y)	5	15	2	20
Ballpen (X)	1	10	1	8
Inkpen (Z)	4	10	5	9
Ink (X)	5	15	5	10

Comment on the nature of goods. [6]

Q3. Attempt any TWO questions out of the following:

(a) How can Learning effect and Economies of Scale reduce cost? Explain using diagrams. [6]

(b) Explain the relationship between total cost curves and average cost curves using diagrams. [6]

(c) In 50 words differentiate between Economies of Scale (EOS) and Increasing Returns to Scale? Explain in detail the factors that result in EOS. [6]

Q4. Attempt any TWO questions out of the following:

(a) In studying for an exam, you are very likely to have experienced various phases of marginal returns. In the light of this statement, discuss Law of Variable Proportions using diagram. [6]

(b) Give an example of Homogenous Production function. Give the equation and relate it to returns to scale. [6]

(c) Draw an Isoquant that represent only one method can be used in the production process. What other cases are possible? Explain with specific reference to Marginal Rate of Technical Substitution. [6]

Q.4 Answer any two: [6+6]

a) Obtain the regression line for the following data and estimate value of y for x = 31. Also, compute coefficient of determination and comment of the result.

X	25	26	27	27	28	29	30	32
Y	27	28	25	28	32	32	29	31

b) To better identify its target market, Alfa Romeo conducted a market research study on a sample of 669 respondents to select one of four qualities that best described him or her as a driver. Each respondent was then asked to choose one of three Alfa Romeo models as her or his choice of the most suitable car. The purpose of the study was to determine whether a relationship existed between a driver's self-image and choice of an Alfa Romeo model. Test at alpha = 0.05

Alfa Romeo Model	*Self-Image*			
	Defensive	*Aggressive*	*Enjoying*	*Prestigious*
Alfasud	22	21	34	56
Giulia	39	45	42	68
Spider	77	89	96	80

c) There is a box containing 10 balls distributed as follows,

Three are colored and dotted ; One is colored and striped
Two are gray and dotted ; Four are gray and stripes

i. What is the probability of drawing a dotted ball ? What is the probability of drawing a striped ball ?
ii. What is the probability of drawing a gray or striped ball ? What is the probability of drawing a striped and gray ball ?
iii. Someone draws a gray ball from the box. What is the probability that it is dotted ?
iv. Someone draws a dotted ball from the box. What is the probability that it is colored ?

Q5. Write short notes on any two: [6+6]

a) Types of errors in the context of statistical hypothesis testing.
b) Advantages of sampling over population census
c) Parametric and Non-parametric tests

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FIRST SEMESTER MBA

END SEMESTER EXAMINATION ***Nov/Dec-2019***

MGT-15 Decision Sciences

Time: 3:00 Hours *Max. Marks : 60*

Note: Answer **ALL** questions. All questions carry equal marks.
Q.1 is compulsory. Select any two options out of the remaining
Use of probability distribution tables is allowed.

Q1.a) You are required to write True/False, choose correct option(s) or solve or fill in the blanks. *[6]*

i. The mean and variance of Poisson probability distribution function are same. (True/False)
ii. If $P(A) = 0.2$, $P(B) = 0.5$, $P(A \mid B) = 0.6$, find $P(A \cup B)$.
iii. The total area under the curve for F distribution is equal to -----.
iv. A random variable which follows chi-square distribution can take values in the range --------
v. If X is normally distributed with mean 12 and standard deviation 4, find the value k such that $P(X > k) = 0.24$
vi. The probability that a consumer will be exposed to an advertisement for a certain product by seeing a commercial on television is 0.04. The probability that the consumer will be exposed to the product by seeing an advertisement on a billboard is0.06. What is the probability that the consumer will be exposed to both advertisements ?

b) Compute the mean, 50th percentile, mode and standard deviation of the following sample data [6]

Class Interval	250 -260	260-270	270-280	280-290	290-300	300-310	310-320
Frequency	8	10	16	14	10	5	2

P.T.O

Q.2 *Attempt any two :* [6+6]

a) A manufacturer claimed that at least 98% of the steel pipes which he supplied to a factory conformed to the specifications. An examination of a sample of 500 pieces of pipes revealed that 30 were defective. Test this claim at a significance level of

i. 0.05

ii. 0.01

b) Figures released by the U.S. Department of Agriculture show that the average size of farms has increased since 1940. In 1940, the mean size of a farm was 174 acres; by 1997, the average size was 471 acres. Suppose an agribusiness researcher believes the average size of farms has now increased from the 1997 mean figure of 471 acres. To test this notion, she randomly sampled 10 farms across the United States and ascertained the size of each farm from county records. The data she gathered follow. Use a 5% level of significance to test her hypothesis. Assume that number of acres per farm is normally distributed in the population.
445 , 489 , 474 , 505 , 553 , 477 , 454 , 463 , 466 , 557

c) On a given day, the number of pneumatic tubes piled up at the workstation is determined eight different times and the following number of tubes are recorded,
23 , 17 , 20 , 29 , 21 , 14 , 19 , 24
Test whether variance is greater than 4 at alpha = 0.05

Q.3 Answer any two: [6+6]

a) A random sample of 10 viewers of Home Shopping Network was selected for an experiment. All viewers in the sample had recorded the amount of money they spent shopping during the holiday season of the previous year. The next year, these people were given access to the cable network and were asked to keep a record of their total purchases during the holiday season. Home Shopping Network managers want to test the null hypothesis that their service does not increase shopping volume, versus the alternative hypothesis that it does at alpha = 0.05.

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
Current Year's Shopping	405	125	540	100	200	30	1,200	265	90	206
Previous Year's Shopping	334	150	520	95	212	30	1,055	300	85	129

b) A sample of 28 professional working women showed that the average amount paid annually into a private pension fund per person was $3352, with a standard deviation of $1100. A sample of 29 professional working men showed that the average amount paid annually into a private pension fund per person was $5727, with a standard deviation of $1700. A women's activist group wants to "prove" that women do not pay as much per year as men into private pension funds. If they use $\alpha = .01$ and these sample data, will they be able to reject a null hypothesis that women annually pay the same as or more than men into private pension funds? The group assumes that the two populations are normally distributed and that the variances of the two populations are equal.

c) Club Med has more than 30 major resorts worldwide. Many of the beach resorts are in the Caribbean, and at one point the club wanted to test whether the resorts on Guadeloupe, Martinique, Eleuthera, Paradise Island, and St. Lucia were all equally well liked by vacationing club members. The analysis was to be based on a survey questionnaire filled out by a random sample of 40 respondents in each of the resorts. Analysis of the survey results yielded the statistics given below. Test at alpha = 0.10.

Survey Result

Resort	*Mean Response*
1. Guadeloupe	89
2. Martinique	75
3. Eleuthera	73
4. Paradise Island	91
5. St. Lucia	85

ANOVA Table

Source of Variation	*Sum of Squares*	*Degrees of Freedom*	*Mean Square*	*F Ratio*
Treatment				
Error		195		
Total	112,564			

the actual numbers is presented below (Positive test result implies disease). Compute Sensitivity, Specificity and Precision. **3 Marks**

		Truth	
		Disease	Non Disease
Test Result	Positive	10 (True +ve)	40 (False +ve)
	Negative	5 (False –ve)	45 (True –ve)

6. Write short notes on any two of the following: **5X2 =10 Marks**

i. Different forms of models in business analytics and types of inputs to decision models,

ii. Major tasks in data pre-processing in a business analytics project

iii. Definition of business analytics as per your understanding supported with an example

iv. An example of multiple linear regression model with two independent variables and assumptions of linear regression model

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THIRD SEMESTER **MBA**

END SEMESTER EXAMINATION ***NOV-2019***

MGT-31 BUSINESS ANALYTICS

Time: 3:00 Hours ***Max. Marks: 50***

Note: Attempt five questions in all. Section A is compulsory. Assume suitable missing data, if any. Use of calculator is allowed.

SECTION A

1. You are required to write True/False, choose correct option(s) or solve or fill in the blanks. Each of parts i to x is of 1 mark. **10 Marks**

i. Which of the following techniques is an unsupervised learning algorithm?
(a) Logistic Regression (b) Multiple linear regression
(c) Clustering (d) Non-linear regression

ii. If there is problem of *auto-correlation* in a regression model, the regression coefficients shall not be BLUE (True/False)

iii. Presence of Auto-correlation in a regression model is tested using:
(a) Durbin-Watson statistic (b) Wald's statistic
(c) F- test (d) Chi-Square Test

iv. Variance Influence Factor is used to identify ----------------

v. The clusters should be so formed that the objects within a cluster are homogenous (True/False)

vi. Integer Programming problem is an example of ----------analytics. (Descriptive or Prescriptive or Predictive)

vii. If the Pearson correlation coefficient between two variables is positive then the covariance between the variables is -----(Positive/Negative)

viii. In a logistic regression, the logit function is: Log [P(Z=0)/ (1- P(Z=0))] = -1 + 0.35X. Then the equation for logit function Log [P(Z=1)/ (1- P(Z=1))] is: (write the steps of solution)
a. -1-0.35X (b) 1- 0.35X (c) 1 + 0.35X

ix. In a logistic model, the statistical significance of a predictor variable is tested using:
(a) Omnibus test (b) Wald's test (c) F-test (d) t-test

x. Regression algorithms are ------------------ (supervised or unsupervised) learning algorithms.

SECTION B

2. *[i] An online store sells products under 8 categories labeled: L1, L2, L3, L4, L5, L6. L7 and L8. The past purchase details of 4 customers (C1, C2, C3, C4) are given below:*

Customer	Product							
	L1	L2	L3	L4	L5	L6	L7	L8
C1	1	0	0	1	1	0	1	1
C2	1	0	1	1	1	1	0	0
C3	0	1	1	0	0	0	1	1
C4	1	0	0	1	1	0	0	0

where $a_{ij} = 1$ if customer i purchased product j
$= 0$ otherwise

Use Jaccard coefficient to find customer who is closest to C1. **5 Marks**

[ii] Customer feedbacks (on a 5 point scale) on 5 training programs (T1,T2,T3,T4,T5) by 3 customers (C1,C2,C3) is provided below. Use Cosine similarity to identify customer who is closest to Customer 1 (C1):

Customer	Feedback on Training Programs				
	T1	T2	T3	T4	T5
C1	2	4	2	4	3
C2	4	3	2	4	5
C3	1	2	3	2	4

Use Cosine similarity to identify customer who is closest to customer 1 (C1). **5 Marks**

3. [i] Two University departments, which are maintaining data in the excel files, are to be merged. It has been decided to now maintain data in the form of a database. What are the issues which are likely to be faced during data integration. Explain with illustrations. **5 Marks**

[ii] The following are sample tuples from employee database of an organization:

Name	Date of Birth	Date of Joining	Mobile	Division Code	Monthly Salary (lakhs)	Blood Group
Rajesh	01-07-1994	01-08-2017	9876542389	HR	2	O+
Mukesh	01-09-1992	03-08-2015	9834278945	FN	3	B+
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Specify attribute type for each attribute. What type of transformation is possible on each attribute type? **5 Marks**

4. [i] What is the purpose of 'Binning' in Data pre-processing . Suppose the data for analysis include the attribute 'marks'. The marks values are:
8,16,9, 15, 21, 21, 24, 30, 26, 27, 30, 34

Use smoothening by (i) bin means (ii) bin boundaries to smooth these data, using a bin depth of 4. Comment on the effect of this technique on given data. **5 Marks**

[ii] Data in respect of five persons with respect to three attributes is given in the following Table:

Height (X)	Score (Y)	Age (Z)
64	580	29
66	570	33
68	590	37
69	660	46
73	600	55

Use Mahalanobis Distance to find how far another person V = (66, 640, 44) is from the above data given the inverse covariance matrix as follows: **5 Marks**

	X	Y	Z
X	3.6885		
Y	0.0627	0.0022	
Z	-1.2821	-0.0240	0.4588

5. [i] The hypothetical performance level distances between pairs of five students who joined an institute to learn French language are given in the following matrix. Use single linkage hierarchical clustering algorithm to form clusters and present in the form of a *dendrogram.* **7 Marks**

Objects	1	2	3	4	5
1	0				
2	10	0			
3	4	8	0		
4	7	6	10	0	
5	12	11	3	9	0

[ii] 100 persons are tested for disease. In actuality, out of these 100 persons, 15 people are diseased and 85 non-diseased. The outcome of test results against

Total No. of Pages 2 (plus attached case) —12—

III SEMESTER MBA

END SEMESTER EXAMINATION NOV/DEC-2019

MGT-32 CORPORATE GOVERNANCE

Time: 3:00 Hours *Max. Marks : 50*

Note : Answer 4 out of 5 question. Question 1 is mandatory. Assume suitable missing data, if any.

Q.1 Read the case and answer the following questions

[a] Explain with an example "bounded awareness" and "bounded ethicality". 5 Marks

[b] Explain from the case 4 steps that organizations can take to increase ethical behaviour. 5 Marks

[c] How Nina Mazar increased premium of insurance firm. 4 Marks

Q.2[a] Generally Morality in both individual life and social life is mostly based on fear of societal censure. Ethics according to Swami Vivekananda Ethics was nothing but a code of conduct that helps a man to be a good citizen. We should be pure because purity is our real nature, our true divine Self or Atman. Do you agree? 4 Marks

[b] Differentiate between Managing Director and CEO. Can one person hold both designation? 4 Marks

[c] Discuss the role of SEBI. 4 Marks

Q.3[a] What are the different types of directors. Discuss the role of a board of director in corporate governance. 6 Marks

[b] Can societal problems be solved by Corporate social responsibility. Support you view with example of some companies.
6 Marks

Q.4 Differentiate and Explain among

[a] Ethics, Morals, Values, Virtue 4 Marks

[b] Honesty and Integrity 2 Marks

[c] Knowledge and Wisdom 2 Marks

[d] Golden and Platinum Rule 1 Marks

[e] Egoism, Altruism, Utilitarianism. 3 Marks

Q.5[a] Who is a whistle-blower. Infosys was in news regarding whistle blower. What was the case. What were the some other important recommendations by Narayan murthy committee. 6 Marks

[b] What is subsistence marketplace. Write a short note on bottom of pyramid. Discuss with an example. 6 Marks

How to Increase Ethical Behaviour in Organizations

Encouraging people to develop a vigilant mindset can go a long way towards reducing unethical behaviour in organizations.

by Ting Zhang, Pinar Fletcher, Francesca Gino and Max Bazerman

FOLLOWING THE COLLAPSE of the world's largest Ponzi scheme in 2008, clients of Bernard Madoff Investment Securities lost an estimated $65 billion in unrealized gains. In hindsight, investors detected major alarm bells that signaled Madoff's returns were too good to be true: They were impossibly steady and high, at 11 per cent per year, never experiencing a down year, and were consistently higher than those of the S&P 500 index, with surprisingly little volatility.

Madoff employed a small, three-person auditing firm that had only one active principal accountant; the other principal was an 80-year-old retired accountant living in Florida. He was extremely secretive about his investment strategy and selective about who could invest in his funds. Despite these telltale signs of fraudulent behaviour, Madoff's Ponzi scheme was not uncovered for more than a decade — a fact that surprised even Madoff himself. Although a few investors suspected something was up, many — including those with extensive knowledge of finance — were either completely blindsided or failed to act on their suspicions.

Behind this scandal were two groups of individuals who contributed to the growth of the Ponzi scheme:

1. The perpetrators, who knowingly committed unethical acts, including those at Madoff Investment Securities who created fraudulent records of non-existent transactions; and
2. The investors, advisers and regulators who had the expertise and fiduciary responsibility to detect fraudulent behaviour — but failed to do so.

This article will focus on the latter group, in an effort to understand the factors that can help people notice unethical behaviour — and act on their suspicions.

Ethics at Work: Key Findings to Date

Large-scale scandals including Madoff, Enron and Worldcom typically have a few 'bad apples' at the core, but are enabled by a larger group of individuals who fail to notice and act — even when there are strong hints of wrongdoing. This has motivated scholars to shift their focus from examining acts committed *with the intention to do harm* to investigations of how individuals who intend to do good are ultimately tempted to act unethically. This latter subset of unethical acts can be categorized as ei- ther intentional (when individuals are cognizant of their ethical violations) or unintentional (when they are unaware that their actions cross ethical boundaries). In the domain of intentional unethical behaviour, the study of 'behavioural ethics' — the systematic and predictable ways in which individuals fail to act ethically — demonstrates that although there are individual differences in people's moral identity and ethical values, morality within an individual is also malleable. Mordechai Nisan's moral balance model shows that people have a 'moral bank account', wherein good deeds 'raise the balance' and bad deeds lower it. Perceptions of a 'surplus' in one's account might lead a person to cheat, whereas perceptions of a 'low balance' might lead one to act more ethically.

Elsewhere, psychologist James Rest's model of unethical behaviour suggests that once an issue has been identified as having moral dimensions, individuals engage in a moral judgment (i.e., they decide whether something is ethical or unethical), which triggers moral intention (they plan to act either ethically or unethically) and moral behaviour (they act, either ethically or unethically). Behavioural ethics research has also shown that peoples' judgments, intentions and behaviour depend on the situational and social forces in the environment. For example, individuals are more prone to cheat when they feel cognitively depleted and can easily justify their behaviour; and because people often look to others to determine acceptable norms, people are also more likely to cheat when they see others cheating.

Alongside the research on intentional acts of cheating is another body of research that studies how individuals engage in

Are All of Our Good Intentions Just Cheap Talk? By Nina Mazar

Like most of you, I consider myself an honourable member of society: Trustworthy, honest and moral. Yet I don't always act accordingly — and judging by the magnitude of insurance fraud, tax deception and the illegal downloading of music, films and games, most of you are like me.

One could say that we are hypocritical. However, to standard economists, most of what people say is just cheap talk: It's meaningless. Only what people *do* is meaningful: Actions speak louder than words. This is what economists call 'revealed preferences', and to an economist, it means that all those who say they care about morality — but then go ahead and engage in various transgressions — don't really care.

To a behavioural scientist like me, the world looks a bit more complex. We believe that for some of those who say they care about morality, it's not just cheap talk: They really mean it. In fact, we believe that this is true for many people. In short, these people are good, but they face 'situational circumstances' that might appear unimportant — that they might not even be aware of — that keep them from being their true 'authentic selves'. As a consequence, if we make small, smart changes to these situational circumstances, we may be able to help people behave more authentically — and act more morally.

To me, this a much better world to live in. Just think about your own life. I'm sure you can all think of plenty of situations in which you were tempted to transgress from your moral code because you could benefit from it. Say, when filling out your tax form, or an insurance claim. And I bet, in those situations, you suddenly became very good at rationalizing why it would be okay to transgress, so that if you did give in, you didn't feel too bad. We are very good at rationalizing so that we can 'have our cake and eat it, too' — and it turns out that some situational circumstances make rationalizations easier to come by than others.

My co-authors and I recently teamed up with a car insurance company in the U.S. This company regularly sends out 'audit forms', asking policy-holders to indicate the odometer mileage for their cars. Insurance premiums are then adjusted to correspond with how much a car is driven. The logic is, 'the more miles driven, the more likely an accident, and the higher the insurance premium'.

As a result, when policy holders receive the audit form, many are tempted to under-report their mileage. Almost immediately, their rationalizations start working: 'I already pay such a high insurance rate!' I'm not the problem, I'm a good driver'. Suddenly, they are under-reporting their mileage, and not feeling bad about it at all. And by the time they reach the end of the form — where they are asked to confirm with their signature that they have filled it out truthfully — they have managed to convince themselves that everything is indeed legit.

By comparison, in a court of law, people are asked, up front, to swear that they will 'tell the truth, the whole truth, and nothing but the truth'. Only *then* do they testify. In short, we ask people to commit to being truthful before, not after they face temptations to misreport. This is a very interesting twist, because such a pre-commitment to the truth is likely to increase people's attention to their own moral standards — to keep them top of mind, and therefore, harder to ignore in the face of temptations. If this is the case, we posited, perhaps we could use this insight to redesign those insurance audit forms.

That's exactly what we did: We randomly assigned a policy holder to either receive the standard audit form (with a signature field at the end), or a form that was identical except for one thing: the signature field was moved to the top. The result: Policy holders who signed the audit form at the top magically seemed to be driving more; on average, 2,500 miles more per car. To put this in *unintentional* acts of cheating. These behaviours fall under the broader category of *bounded awareness*—a state in which we systematically fail to notice relevant information that falls outside of our attention at the time of making a decision.

Individuals can also exhibit *bounded ethicality*, making unethical decisions that are outside of their own awareness and inconsistent with their consciously-held values. Both operate at an unconscious level: Individu- als are not aware of how the biases that arise from their limited capacity to notice key information influence their judgments.

Examples of *bounded ethicality* include implicit prejudice and conflicts of interest. Even individuals who espouse equality and diversity might discriminate based on gender or race without their awareness. Such implicit biases stem from stereotypical associations that even individuals who consciously strive to be unbiased have difficulty overcoming. Furthermore, conflicts of interest can operate outside of an individual's awareness. Auditors, for instance, may exhibit bounded ethicality when they fail to recognize how the promise of becoming a future employer for the audited firm precludes them from making impartial audits.

Because these biases operate at an implicit level, interventions that would be aimed at addressing *intentional* acts of cheating do not necessarily apply. Therefore, scholars are developing interventions aimed at mitigating them. For example, recent research has demonstrated that employers evaluating candidates separately exhibited a gender bias: They were more prone to hiring men for math-related tasks and women for verbal-oriented tasks, even when gender did not predict performance on these tasks. In contrast, behavioural economist Iris Bohnet et al. found that evaluating male and female candidates *jointly* rather than separately eliminated reliance on gender stereotypes in hiring decisions.

perspective, if each of the 13,000 policy holders in our experiment had received the revised form, this would have resulted in an additional $2 million in insurance premiums for the company. And this is just from a small subset of policy holders, from one company.

In Ontario alone, auto insurance fraud accounts for up to $1.6 billion yearly — three times the province's budget to fight its chronically-high youth unemployment rate. Just imagine what our small, costless change to the audit form could do here.

Our findings show that the reason people fudge their numbers is not that they're cold blooded and calculating. If people only cared about the likelihood of being caught and the magnitude of the punishment, moving the signature field to the top should make no difference. Instead, many people *do* care about being virtuous, and moving the signature field to the top makes it possible for them to ignore the devil on their shoulder, encouraging them to fudge the numbers.

It's important to point out though that there's nothing special about morality. We can find mismatches between what people say they care about, and how they act in many other areas. Even in life-and death type of situations. Take, for example, organ donation. Every day more than 20 people die in the U.S. because of a lack of available organs. In Canada, it's two people every three days.

If everyone registered as an organ donor today, this crisis would be a thing of the past. So I ask you, why are half of all the people in the U.S. and three quarters of the people in Canada not registered? If you believe that actions speak louder than words, you would say, 'People just don't care. Even Canadians!'

On the other hand, if you ask people 'Do you support organ donation?', everything looks much rosier. About 90 per cent of people say they do. So, which one is it? If we believe that this mismatch between what people say they care about, and how they act, is mostly due to situational circumstances, then we should be willing to nudge them towards more authentic behaviour.

The good news is, most people are good. And if we become more sensitive to situational circumstances, we may be able to nudge them towards more authentic behaviour. This approach holds great potential in many areas, beyond insurance fraud and organ donation. Credit card delinquency, obesity, and energy conservation come to mind immediately. If we can systematically and responsibly harness these insights, what a wonderful world this could be.

Nina Mažar is an Associate Professor of Marketing and Co-Director of Behavioural Economics in Action at Rotman (BEAR) at the Rotman School of Management. She is on leave until November of this year to serve as the Behavioural Scientist of the Global INsights Initiative (GINI) at The World Bank in Washington DC. In 2014 she was named one of the 40 Most Outstanding B-School Profs Under 40 in the World by the business education website Poets&Quants. This article is adapted from her presentation at TEDx Toronto.

Rotman faculty research is ranked #3 globally by the *Financial Times*.

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People have a 'moral bank account' wherein good deeds 'raise the balance' and bad deeds lower it.

Whereas past research has aimed to reduce *bounded ethicality* that manifests as implicit biases, we recently set out to investigate factors that may help individuals notice when options that appear attractive are in fact 'too good to be true'.

Research on *inattentional blindness* suggests that preparing peoples' attention for a certain type of information or data significantly increases their chance of noticing that information. For example, when signs warning drivers about the presence of cyclists on the road are present, drivers become more likely to notice cyclists, which improves the safety of everyone on the road. We wondered, would preparing individuals with a similar mindset of vigilance prior to making a decision lead them to attend to more information that challenges the viability of seemingly-attractive options?

To help us understand how creating a *vigilant mindset* affects the ability to notice elements of unethical behaviour and act on critical information, participants in our study played the role of a financial advisor in an investment game. 'Advisors' were asked to select one fund to recommend to a hypothetical client from a pool of four funds. Unbeknownst to participants, the fund with the most attractive risk-return profile—'Fortitude Investments'—was based on Madoff's feeder fund.

In addition to charts and graphs, individuals could also read the fine print that contained important information about each fund. For the disguised Madoff feeder fund, the additional facts informed advisors that the fund was exclusive to investors with strong relations to the fund, opaque on disclosing its investment strategy, and maintained unconventional auditing practices. Participants who ignored this information and selected Fortitude Investments lost all of their clients' money at the end of the hypothetical four-year investment period.

So, what percentage of individuals selected Madoff's feeder fund—despite having access to critical information about the fraudulent nature of the fund?

The answer depended on whether the 'advisor' selected the fund that appeared 'most suspicious' to them *before* or *after* they made their decision for the client. Those who made an investment decision for their client *before* contemplating their suspicions selected Madoff's feeder fund 68 per cent of the time; whereas those who made their decision *after* determining which fund was the most suspicious selected the fund 51 per cent of the time.

In other words, instilling a *vigilant mindset*—by merely asking participants to identify the fund that 'seemed most suspicious' to them prior to making a decision—reduced the propensity of selecting Madoff's fund by 17 percentage points. The timing of instilling vigilance is critical to helping individuals notice fraudulent behaviour and act on their suspicions: Once individuals have already made a decision, they will be less likely to consider disconfirming evidence and notice critical information.

Implications for Management

Failure to notice unethical behaviour is a significant problem in modern organizations—and in society, more broadly. Given the prevalence of both *bounded awareness* and *bounded ethicality* across organizational contexts, our findings highlight the value of proactively raising vigilance in helping individuals consider reasons not to take a particular course of action.

Although increasing vigilance prior to making a decision decreased individuals' propensity to select Madoff's fund, as indicated, more than half of the individuals still recommended it. Clearly, vigilance is not enough. Following are some other proven tools that can complement a vigilant mindset.

1. ASK LOTS OF QUESTIONS

Although this might seem obvious, many people fail to recognize that they can obtain more information than what is in front of them. Imagine that you are concerned that a supplier you are considering for your company is using child labour. Directly asking 'Do you use child labour?' is unlikely to be effective, but asking multiple related questions can help you determine whether the supplier is violating laws. Questions like, Can you break down the cost of materials and labour for me? How long does it take each worker to produce the product? Can you provide demographics of your workers?, and Can you tell me how you manufacture the products? may indicate whether suspicion is warranted. You may realize, for instance, that it is impossible for the number of workers provided in their figures to produce all of products manufactured, suggesting under-reporting of the number of employees.

2. 'TRIANGULATE' ON THE FOCAL ISSUE WITH MULTIPLE SOURCES

Sometimes, investigating one source is not enough. 'Triangulation' is a powerful technique that consists of verification from

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Most people don't notice when someone answers a slightly different question from the one that was asked.

two or more sources. The idea is that one can be more confident with a result if different methods lead to the same result.

When asking multiple sources the same question, are the answers congruent with one another, or do they conflict? For example, consider the scenario that you are concerned a supplier is using child labour. If multiple sources reveal conflicting numbers about the number of employees working at the company, you have reason to be more suspicious. Inconsistency is often a sign that suspicion is warranted.

3. ATTEND TO 'ARTFUL DODGES'

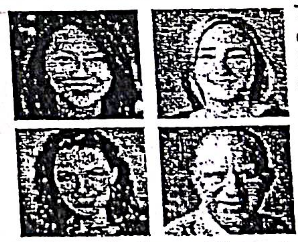
When people are asked questions that could reveal the unethical nature of a situation, they often give 'non-answers' in order to deflect attention away from the issue of concern. Such 'dodges' are signs that suspicions are warranted. For example, an individual who does not want others to know about the use of child labour may direct discussion to the quality of products or materials when asked about the low cost of labour. Research shows that individuals tend to not notice when others are answering a slightly different question from the one that was asked. One way to detect artful dodges is to remember the original question and to think critically about whether the answer provided truly addresses the focal question.

4. LEAVE MORE TIME TO DECIDE

After gathering all relevant information, leaving time to decide can prevent you from overlooking critical information. In a famous experiment, theological seminary students were asked to give a lecture. Some of the priests were told that they needed to hurry in order to arrive at the building on time, whereas others were told they had plenty of time. On their way over to the lecture, all of the priests passed by a man slumped over, who appeared to be in need of medical attention. The priests who were not in a rush were more likely to help the man; while those in a rush were more likely to pass by without even noticing him. Time constraints proved to be an even bigger deterrent of helping behaviour than the content of the talk: Some of these seminary students were on their way to give a talk on being a Good Samaritan. As this study indicates, when people are in a rush, they a) do not have enough time to do any additional investigative work, and b) fail to notice even when obvious information is in front of them.

In closing

By embracing a vigilant mindset as a 'default state', managers in any industry can develop a keen ability to notice unethical behaviour. In our view, this is a critical step towards reducing both bounded ethicality and bounded awareness in modern organizations. *RM*



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technology leader. SE's goal was not to copy technology innovated by Sony, Matsushita, Phillips, and Nokia but for SE's engineers to develop the research and engineering skills necessary to rapidly innovate leading-edge technologies, such as LCD displays, to create products more advanced than its competitors. Within a decade, SE became the leading supplier of advanced flash memory chips and LCD screens, premium-priced products that it sold to other global electronics makers, including Japanese flat screen TV makers. Samsung also made the development of a new competence in global marketing an important part of its business model. For example, while Nokia was the leading cell phone innovator, Samsung was the first to realize customers wanted color screens for their phones to allow them to play games and built-in cameras to send photographs to their friends. Both of these incremental advances allowed Samsung to dramatically increase its share of the cell phone market. In 2009, it was the second-largest cell phone maker after Nokia. By 2007, Samsung had become one of the most innovative global electronics makers with its four research divisions: semiconductors, telecommunications, digital media, and flat screen LCD displays. In 2008, however, SE, like most other electronics companies, was forced to restructure its business divisions because of the global recession. The problem facing SE and other global electronics companies, such as Sony, was how to grow while simultaneously reducing its cost structure and increasing its technological edge. In 2009, Samsung's new CEO Lee Yoon Woo announced a major restructuring that would consolidate its four divisions into two to reduce costs but still speed product development. SE's semiconductor and LCD display businesses were combined into a new Device Solutions Division, and its televisions, mobile phones and other consumer electronics, such as printers and computers were placed in the Digital Media and Communications Division. In addition, it is important to note that Samsung Electronics is only one division of the Samsung Corporation, the parent Samsung Corporation has dozens of divisions that are involved in industries such as shipbuilding, construction, life insurance, leisure, and so on—in fact, the Samsung empire accounts for 20% of South Korea's total exports.

(a) What type of corporate level strategies (growth strategies) the company has been pursuing? (3)

(b) In what ways has Samsung's multi-business model changed over time? Why did its top managers make these changes? (3)

(c) What type of restructuring strategies the company has implemented? (2)

(d) Identify the resources, capabilities, and distinctive competencies of Samsung Corporation. In your opinion, will they be able to achieve sustainable competitive advantage with their current business model. Suggest. (4)

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SEMESTER III **M.B.A.**

END SEMESTER EXAMINATION **Nov/Dec- 19**

MGT 33: STRATEGIC MANAGEMENT

Time: 3 hours **Max Marks: 60**

Instructions: Answer all questions by selecting any two parts from each question (Q.No. 1-4). Question No. 5 is compulsory. All questions carry equal marks.

1(a) Best Buy is the largest consumer electronics retailer in the United States. The company competes aggressively on price with such rivals as Costco Wholesale, Sam's Club, Walmart, and Target, but it is also known by consumers for its first-rate consumer service and knowledgeable staff. Best Buy consumers also appreciate that demonstration models of PC monitors, digital media players and other electronics are fully powered and ready for in-store use. Best Buy Geek Squad tech support and installation services are additional customer service features that are valued by many customers. How would you characterize Best Buy's competitive Strategy? Explain your answer by giving advantages and disadvantages of this strategy. (6)

1(b) "Good strategy execution requires a team effort. All managers have strategy executing responsibility in their areas of authority and all employees are active participants in the strategy execution process." In the light of the above, discuss in brief, various measures which management should take to execute strategy. (6)

1(c) Assume that you are in- charge of developing the strategy for a multinational company selling the products in some 30 different countries around the world. One of the issues you face is whether to employ a multicounty strategy, a transnational or a global strategy. Explain which strategy would make sense in case of the following products and why?

i. Mobile phones ii. Footwears iii. Movies (6)

2(a)(i) Why do pioneering companies often unable to create a business model that allows them to be successful over time and remain the market leaders? (3)

2(a)(ii) Explain the kind of corporate level strategies which might be used in the following cases:

i. Arvind forays into e-commerce space with custom clothing brand 'Creyate'.

ii. A leading FMCG company has decided to reduce its investment in a particular product to extract maximum profit from its sales.

providing healthy and organic food. (3)

2(b) *"During 1980s, Disney's transformation was based not only on strategies that took advantage of the company exiting resources and capabilities but also on strategies that built new resources and capabilities." In the light of the above statement, explain the role of resources and capabilities in determining relationship between Distinctive competencies and strategy.* (6)

2(c) *Assume you are in mobile phone industry in India.* On the basis of CAGE framework, rank the following countries in which you should expand out of Malaysia, Australia, Bazil, and China. Explain with suitable reasons. (6)

3(a) "A mature industry is commonly dominated by a small number of large companies whose objective is to collectively reduce the strength of industry competition to preserve both company and industry profitability." Explain the alternative strategies such companies can adopt to achieve the above said objective. (6)

3(b) Explain the type of offensive tactic highlighted in the following situations:
i. Microsoft Corp. is offering free licenses for its database software to current Oracle Corp. customers in its latest effort to wrestle market share from its competitor.
ii. Procter & Gamble began a program of extensive market research to promote its spray cleaning product called Cinch. Wilson Harrell, owner of Formula 409, knew that Procter & Gamble would perform test market research. He began a program where he reduced advertising expenditures in Denver and stopped promoting his Formula 409. P&G immediately begin a national sales campaign. However, before the company could begin, Harrell introduced a promotion of his own. He took the Formula 409 sixteen-ounce bottle and attached it to a half-gallon size bottle. He then sold both at a significant discount. This quantity of spray cleaner would last the average consumer six to nine months. As a result, the market for Procter & Gamble's Cinch was significantly reduced.
iii. In 1980s, Canon took over Xerox's copier market by focusing on small size copier market that could not afford Xerox's large copiers. (6)

3(c) "Harley Davidson, GM, Walt Disney, and Digital Equipment Corporation (DEC), among many others, which all at one time were held up as an example of managerial excellence, have gone through periods where their financial performance was poor and they clearly lacked any competitive advantage." In the

competitive advantage?

4(a) Identify the following products of ITC in which quadrant of BCG matrix do they fall into and why:

i. FMCG Food	iii. Hotels
ii. FMCG cigarettes	iv. ITC Infotech

(6)

4(b) Identify and explain Porter's generic competitive business level strategy used in the following situations:
i. Dell computers has decided to rely exclusively on direct marketing.
ii. Our basic strategy was to charge a price so low that micro computer makers couldn't do the software internally for that cheaply.
iii. 'Disney channel' a TV channel has identified a profitable audience niche in the electronic media. It has further exploited that niche through the addition of new channels like 'Disney Junior. (3*2=6)

4(c) "A brilliant strategy can put a firm on the competitive map, but only solid execution can keep it there." In the light of the statement, explain the difference between strategy formulation and strategy implementation? (6)

5. Case study

In the 2000s, Samsung Electronics (SE), based in Seoul, Korea, became the second-most profitable global technology company after Microsoft. SE accomplished this when its pioneering CEO Lee Kun Hee decided to develop and build distinctive competences first in low-cost manufacturing, second in R&D, and then in new production in new industries. SE's core industry is the consumer electronics industry. In the 1990s, its engineers studied how Japanese companies, Sony and Panasonic, innovated new products. Then, SE's engineers copied Japanese technology and used their low-cost skills to make lowpriced versions of the products that they could sell at lower prices than the Japanese companies. For example, SE decided to enter the cell phone industry and make lower-cost phones than companies such as Nokia and Motorola. SE also entered the semiconductor industry in which it worked to make the lowest-cost memory chips; soon it became the global cost leader. SE also entered other digital-product markets such as cameras, printers, and storage devices. SE's strategy was successful and profitable, but it was not playing in the same league as Sony, for example. Sony could charge premium prices for its leading electronics and continuously plowback profits into the R&D needed to make more advanced state-of-the-art electronics. CEO Hee decided to adopt new strategies that would allow his company to compete head-to-head with Japanese and European electronics companies and make it a global given stock price? Briefly discuss how two stage DDM improves upon the Constant growth DDM. (6+6)

5) a) Distinguish and describe each of the following performance measures: i) The Sharpe Ratio, ii) Treynor's measure and iii) Jensen's alpha.

b) An analyst wants to evaluate portfolio X consisting entirely of US common stocks, using both the Treynor and Sharpe measures of Portfolio performance. The following table provides Return, SD and Beta during past 8 years of each:

	Avg. return	SD	Beta
Portfolio X	10%	18%	0.6
S &P 500	12%	13%	1
T-bills	6%	NA	NA

Calculate Treynor and Sharpe measures for both: Portfolio X and the S&P 500. Explain the performance of the portfolio X vis-à-vis S&P 500. Also explain the reason for conflicting results in performance using Treynor's vs Sharpe's measure. (6+6)

6) Write short notes on any three:
a) Support and Resistance levels
b) Challenges to technical trading rules
c) Candlestick charts
d) Relative strength Index
e) Purpose of bond ratings
f) Immunization (4x3)

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Third Semester MBA

END- SEMESTER EXAMINATION **Nov. -2019**

MGF-01 Investment Management

Time: 3:00 Hours *Max. Marks: 60*

Note: Answer any five questions. Assume suitable missing data, if any.

1 a) "Young People with little wealth should not invest money in risky assets such as the stock market because they cannot afford to lose what little money they have." Do you agree or disagree with this statement. Give reasons.

b) Your healthy 63 year old neighbor is about to retire and comes to you for advice. From talking with her you find out that she was planning to take all her money out of her company's retirement plan and investing in Bond Mutual funds and Money market funds. What would be your advice to her?

c) LIC Mutual fund has a portfolio of Rs.450 mn and liabilities of Rs.10 mn. If 44 mn shares are outstanding what is NAV of the fund? If a large investor redeems 1mn. shares, what happens to portfolio value, to shares outstanding and to NAV. (4x3)

2. a) Briefly explain the concept of Efficient market hypothesis and each of its three forms.

b) Briefly explain two major role or responsibilities of portfolio managers in an efficient market environment?

c) The correlation coefficient between pairs of stocks is as follows:

i) Corr(A,B) = .85
ii) Corr(A,C) = .60
iii) Corr(A,D) = .45

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Each stock has an expected return of 8% and SD of 20%. If your current portfolio consists of only stock A and you can add some of only one other stock to the portfolio, which stock would you choose and why? (4x3)

3) a) Mr. John is considering the purchase of one of two bonds described in the following table. John realizes his decision will depend primarily on effective duration and he believes that interest rate will decline by 50 basis points at all maturities over the next 6 months.

particulars	ABC	PQR
Market price	101.75	101.75
Maturity date	1-Jun-22	1-Jun-22
call date	Non- callable	1-Jun-17
annual coupon	5.25%	6.35%
interest payment	semiannual	semiannual
Effective duration	7.35	5.4
YTM	5.02%	6.10%
credit rating	A	A

Calculate the percentage price change forecasted by effective duration for both the bonds, if interest rate declines by 50 basis points over the next 6 months.

b) An insurance company must make payments to a customer of Rs.10 mn in one year and Rs.4 mn. In 5 years. The yield curve is flat at 10%, If it wants to fully fund and immunize its obligation to this customer with a single issue of Zero coupon bond, what maturity bond must it purchase? Also explain in brief the relevance of yield curve for a bond manager. (6+6)

4) EDM is a large , diversified forest products company. Approx. 75% of its sales are from paper and forest products and remainder from financial services and real estates. The company own 5.6 million acres of timberland which is carried at very low historical cost on the balance sheet. Suppose you are an analyst at the investment counseling firm, Centurion Investments and have been given the task assessing the outlook of EDM, which is being considered for purchase and comparing it to another forest company SHC in Centurion's portfolio. SHC is a major producer of Lumber products in US. Building products, primarily lumber and plywood account for 89% of SHC's sales with pulp accounting for the remainder. SHC owns 1.4 mn acres of timberland which is also carried at historical

cost on the balance sheet, In SHC's case however the cost is not as far below as current market compared to ED.

FY 2018	amount ($millions)	FY 2018	amount ($millions)
Income statement (ED)		Income statement (SHC)	
Sales	7406	Sales	1793
EBIT	795	EBIT	145
Interest exp (net)	-195	Interest exp (net)	-8
EBT	600	EBT	137
Taxes	-206	Taxes	-46
Tax rate	34%	Tax rate	34%
Net income	394	Net income	91
Preferred Dividend	0	Preferred Dividend	0
Net income to Equity SH	394	Net income to Equity SH	91
Common shares O/s(mn)	201	Common shares O/s(mn)	38
Balance Sheet summary(ED)		Balance Sheet summary(SHC)	
Current assets	1367	Current assets	509
Timberland assets	615	Timberland assets	518
property, Plant and Equip.	5854	property, Plant and Equip.	1037
other assets	429	other assets	40
Total assets	8265	Total assets	2104
Current liabilities	1816	Current liabilities	195
Long term Debt	1585	Long term Debt	589
Deferred taxes	1000	Deferred taxes	153
Equity(preferred)	0	Equity(preferred)	0
Equity(common)	3864	Equity(common)	1167
Total Liabilities and equity	8265	Total Liabilities and equity	2104
closing share price($)	22	closing share price($)	27

a) On the basis of data given above calculate each of **five ROE components** for both the companies in 2018. Using the five components, calculate ROE for both the companies in 2018. Explain the difference in ROE of two companies, if any.

b) Using 11% as the required rate of return and a projected growth rate of 8%, compute a constant growth DDM value for EDM and SHC and compare it with its

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SEMESTER III **M.B.A.**

END SEMESTER EXAMINATION **Nov/Dec- 19**

MGF 02: TAX PLANNING AND MANAGEMENT

Time: 3 hours **Max Marks: 60**

Instructions: Answer all questions by selecting any two parts from each question (Q.No. 1-4). Question No. 5 is compulsory. All questions carry equal marks.

1(a) Explain with reasons whether the following transactions attract income-tax in India in the hands of recipients?

i. Salary paid to Mr. David, a citizen of India 15,00,000 by the Central Government for the services rendered in Canada.

ii. Legal charges of 7,50,000 paid to Mr. Johnson, a lawyer of London, who visited India to represent a case at the Supreme Court.

iii. Royalty paid to Rajeev, a non-resident by Mr. Mukesh, a resident for a business carried on in Sri Lanka.

iv. Interest received of 1,00,000, on money borrowed from France, by Ms. Dyana, a non-resident for the business at Bangalore.

v. Mr. X has received gift of 6,000 in cash on his birthday from each of his eleven friends.

vi. On the occasion of her marriage on 07.09.2018, Neha has received 1,20,000 as gift out of which 85,000 are from relatives and balance from friends. (6)

1(b) Mr. Ajay has incomes as given below:

-Income under the head house property 15,00,000

-Gift of a painting from a friend with market value 2,00,000

-Gift of shares and securities from Mrs. X valued 3,00,000

-Income under head salary 3,00,000

He has paid advance tax as given below:

Upto 15th June 2018 15,000, Upto 15th Sept 2018 30,000

Upto 15th Dec 2018 50,000, Upto 15th March 2019 60,000

Balance amount of tax was paid and return of income was filed on 10th

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Sept 2019. Compute his tax liability for the Assessment Year 2019-20 and also interest under section 234A, 234B and 234C. (6)

1(c) Mr. X owns a residential house in Delhi. The house is having two identical units. First unit of the house is self-occupied by Mr. X and another unit is rented for 55,000 p.m. The rented unit was vacant for three months during the year. The particulars of the house for the previous year 2018-19 are as under:

Standard Rent	11,20,000 p.a.
Municipal Valuation	10,44,000 p.a.
Fair Rent	11,35,000 p.a.
Municipal tax paid by Mr. X	12% of the Municipal Valuation
Light and water charges	800 p.m.
Interest on borrowed capital	2,000 p.m.
Insurance charges	3,500 p.a.
Painting expenses	16,000 p.a.

Compute his income and tax liability of Mr. X for the assessment year 2019-20. (6)

2(a) Mrs. X has let out one residential house property @ 1,00,000 p.m. and she has paid municipal tax of 1,00,000. She has taken a Mediclaim policy on 17.07.2018 in the name of Mr. X and paid premium of 18,000 by cheque. She has incurred 21,000 on the treatment of her brother who is dependent on her and suffering from severe disability. She has purchased N.S.C. in P.Y. 2016-17 and there is accrued interest of 30,000 and also there is accrued interest of PPF 10,000. She has taken Jeevan Suraksha Policy in the name of Mr. X and paid premium of 19,000. She has taken a loan in 2012-13 from SBI for the education of his son who is studying in B.com (Hons) in SRCC and she had paid principal amount of 60,000 and interest 10,000 in P.Y.2018-19.
She has Agricultural Income 1,00,000
Compute her Income Taxable Income for the A.Y.2019-20. (6)

for the Assessment Year 2019-20. Assuming employee not covered under Payment of Gratuity Act 1972. (6)

5. Write short notes on the following:

(a) Tax deducted at source

(b) Tax Planning, Tax Avoidance and Tax Evasion

(c) Treatment of depreciation under income from Business/Profession (3*4=12)

Table 1:

Cost Inflation Index	
Financial year	*Cost Inflation Index*
2001-2002	100
2002-2003	105
2003-2004	109
2004-2005	113
2005-2006	117
2006-2007	122
2007-2008	129
2008-2009	137
2009-2010	148
2010-2011	167
2011-2012	184
2012-2013	200
2013-2014	220
2014-2015	240
2015-2016	254
2016-2017	264
2017-2018	272
2018-2019	280

END

2(b) Mr. Atul has received income of 8,00,000 in connection with his business. Other information is as given below:

- He has donated 30,000 to a political party by cheque.
- He donated 10,000 by cheque to Delhi University notified under section 80G
- He paid premium of medi-claim policy 6,000 by cheque in the name of his major married independent son.
- LIC premium paid 25,000 on 15.01.2019.(Policy value 1,00,000)
- Repayment of housing loan to Indian Bank 50,000
- Payment made to LIC pension fund notified under section 80CCC 20,000

Compute income tax liability for A.Y 2019-20. (6)

2(c)(i) Mr. X, a mentally retarded minor, has a total income of 1,20,000 for the assessment year 2019-20. The total income of his father Mr. Y and of his mother Mrs. Y for the relevant assessment year is 2,40,000 and 1,80,000 respectively. Discuss the treatment to be accorded to the total income of Mr. X for the relevant assessment year.

2(c)(ii) Mr. X has transferred through a duly registered document the income arising from a godown, to his son, without transferring the godown. In whose hands will the rental income from godown be charged? (2*3=6)

3(a) The following are the details relating to Mr. John, a resident Indian, aged 57, relating to the year ended 31.03.2019:

Income from salaries	2,20,000
Loss from house property	(1,90,000)
Loss from cloth business	(2,40,000)
Income from speculation business	30,000
Long-term capital gains from sale of urban land	2,50,000
LT capital loss from sale of listed shares (STT paid)	90,000
Loss from card games	(32,000)
Income from betting	45,000
Life insurance premium paid	1,20,000

Compute the total income and show the items eligible for carry forward. (6)

3(b) (i) Mr. X submits his return of income on 12.09.2019 for AY 2019-20 consisting of income under the head house property and other sources. On 21.01.2020, he realized that he had not claimed deduction under section 80TTA in respect of his interest income on the Savings Bank Account. He wants to revise his return of income, since one year has not elapsed from the end of the relevant Assessment Year. Discuss.

(ii) Mr. Atal, a super senior citizen, has reported a Gross Total Income 5,60,000 and the deductions eligible under Chapter VI-A amounting to 70,000 for the previous year 2018-19. Is he liable to file his return of income u/s 139(1) for the Assessment year 2019-20? If so Why?

(iii) Mr. Kamal filed his Return of Income for the Assessment Year 2019-20 on 30-03-2020. Can he revise such return of income? If so Why? (3*2=6)

3(c) Mr. A (Date of birth 01.10.1946) has purchased one house on 01.04.1995 for 4,00,000 and incurred 2,00,000 on its improvement on 01.10.1998. Its market value on 01.04.2001 was 3,00,000. This house was acquired by the Government on 01.10.2013 and the compensation fixed was 50,00,000 and the Government has paid half of the compensation on 01.10.2018 and balance half on 01.10.2019. The assessee has filed an appeal for increasing the compensation and the court has given decision on 31.03.2020 directing the Government to pay additional compensation of 5,00,000. The Government has paid half of the amount on 01.04.2021 and balance half on 01.04.2022. He has invested 72,000 in NSC in previous year 2018-19. Compute assessee's tax liability for the assessment year 2019-20 and also capital gains for various years. (6)

4(a) Fill in the blanks (cost inflation index is given on page no. 6):

i. Mr. X acquires 200 shares of a company on 1.5.2014 at Rs. 50 each. On 9.11.17, the company allotted bonus shares in ratio of 1:1. The fair market value as on 31.1.18 was Rs. 220. Now on 3.7.18, X sells all his

shares for Rs. 250. In this case, CG on bonus shares will be _______________.

ii. ABC Ltd. has one plant and machinery on 01.04.2018 with w.d.v 6,00,000 and it was acquired by the company on 01.04.2007 and the plant was sold on 01.01.2019 for 11,00,000 and selling expenses are 30,000, in this case, capital gains shall be __________________

iii. X converts his capital asset (acquired on June 10, 2008 for 60,000) into stock-in-trade on March 10, 2014. The fair market value on the date of the above conversion was 3,00,000. He subsequently sells the stock-in-trade so converted for 4,00,000 on June 10, 2018. in this case, capital gains shall be ____________________. (6)

4(b) Mr. X is employed in ABC Ltd. getting basic pay 41,000 p.m., dearness allowance 7,000 p.m. (10% of the dearness allowance forms part of salary for retirement benefits). The employer has paid commission of 3,000 p.m. and has allowed him medical allowance 400 p.m. The employee was paid house rent allowance 6,000 p.m. The employee has paid rent of 5,000 p.m. The employer has discontinued payment of house rent allowance with effect from 01.09.2018 and has provided him rent free accommodation with effect from 01.11.2018. The accommodation was owned by the employer and the population of the place is 4,00,000. The employee was allowed arrears of salary 10,000 and advance salary 20,000. The employee was also provided furniture with effect from 01.01.2019. Its original cost is 1,00,000 and written down value is 35,000. Compute employee's Tax Liability for the Assessment Year 2019-20. (6)

4(c) Mr. XYZ is employed in ABC Ltd. getting basic pay 22,000 p.m., dearness allowance 5,000 p.m. He was retired on 21.12.2018. The employer has allowed him pension of 9,000 p.m. and the employee has requested for commutation of 52% of his pension. The employer has allowed him such commutation on 01.02.2019 and has paid 5,61,600. The employer has paid him gratuity of 6,95,000 and employee has completed service of 20 years and 11 months. Compute Tax Liability

Total No. of Pages 2 *Roll No.* ...... -27-

Third Semester **MBA**

END- SEMESTER EXAMINATION **Nov. -2019.**

MGF-05 International Financial Management

Time: 3:00 Hours *Max. Marks: 60*

Note: Answer any five questions. Assume suitable missing data, if any.

1) a) Discuss the evolution of international monetary system?

b) How can Balance of Payments disequilibrium be corrected through the flexible exchange rate system? Also explain what are the advantages of currency pegging? (6+6)

2) a) Explain the concept of Balance of payment? What could be the cause for a current account deficit or surplus? How can a country manage continuous current account deficit?

b) What will be the BOP entries of following transactions?

i) An Indian firm exports goods worth INR 500mn. to a firm in Australia. Australian firm pays from its bank account kept with SBI of Mumbai.
ii) An Indian Firm imports equipment from a firm in US by paying INR 60 mn. US firm deposits that amount in Mumbai branch of American Express Bank.

3) a) Explain the absolute and relative version of Purchasing power parity? In the real world there may be deviations from parity due to many reasons. Explain in brief. Also discuss the implications of the same.

b) What is International Fisher Relation? Following are the Interest rates and spot rates of exchange:

- Spot rate: USD/INR = 39.45/50
- Interest rates in India = 10-10.25%
- Interest rates in US = 7-7.5%

If Interest rate parity holds, what are the forward quotes?

4) a) How is the exchange rate determined by the forces of Demand and supply? "Exchange rate forecasts are used for several purposes" Discuss in brief.

b) "Fundamental analysis involves studying certain macro-economic variables that are more likely to influence exchange rates" In the light of above statement explain in brief any one model..

5) a) Distinguish between Foreign exchange exposure and Foreign Exchange risk? Why do firms need to manage foreign exchange risk?

b) A firm in Mumbai wants to buy an equipment costing USD 5mn. from a company in New York. Indian Firm is permitted to pay the amount in 3 months. Current spot rate of USD/INR is 45. The firm expects the spot rate of US$ to change in 3 months. Spot rat may be USD/INR = 44, 44.5.46, 46.5 or 47. The three month forward rate is USD/INR 46 Interest rate is 6% in India and 4% in US. In the Indian option market the CAL option of US $ with an expiration date coinciding with the 3 month period has an exercis rate of INR 46, Option premium is INR 10,000. The PUT option has also the same valu for the same 3 month period.

Calculate the cash flows under each alternative course of action?

6) a) How is NPV of a project different from its APV? Why does NPV differ from th project's perspective to the parent firm's perspective?

b) What is risk in International capital budgeting decision? How is risk handled i International capital budgeting decision?

XXXXX

Total No. of Pages 2

THIRD SEMESTER

Roll No. ......

MBA — 29 —

END SEMESTER EXAMINATION

(Nov-2019)

MGH-01 MANAGEMENT OF INDUSTRIAL RELATIONS AND LABOUR LEGISLATION

Time: 3 Hours

Max. Marks : 60

Note : Answer any five questions.

All questions carry equal marks.

Assume suitable missing data, if any.

Q1 Describe the following:

A. Termination of Services

B. Grievance Procedure

Q2 State the welfare provisions under Contract Labour (Regulation & Abolition)Act, 1970.

Q3 a. An accident took place while an insured person was coming from his place of work with the express permission of his employer as a passenger in a vehicle provided by the employer. The injured person was under no obligation to his employer to travel by that vehicle. State whether this injured person is entitled to disablement benefits in accordance to the provisions in the ESI Act, 1948?

b.An employee was on authorized leave for a week without pay from his employer. The employer deducts theemployees share of contribution for that week out of his subsequent weeks wages. Is the deduction legal ? (The ESI Act, 1948)

Q4 Describe the main provisions of The Payment of Bonus Act, 1965.

Q5 a. Define and explain :

i) Partial disablement and Total disablement
ii) Occupational disease

b. A railway employee was ordered to travel to a certain station and repair there a pipeline. After finishing this work he was hurrying across the platform when he slipped and fell and died as a result of the fall. Is the employer liable to pay compensation in this case. State reason.

Q6 Discuss the methods of workers participation in management.

Q7 What is an 'Industrial Dispute'? Describe the machinery set up in Industrial Dispute Act, 1947 for settlements of disputes.

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Total No. of Pages 02 Roll No. ....

SEMESTER – III MBA

END SEMESTER EXAMINATION Nov-Dec 2019

Paper code: MGH02 Compensation Management

Time: 3 Hours M.M.60

Note: All questions carry equal marks. Attempt any 5 questions

Q1. Write short notes on any 3 of the following

1. Different types of incentive plans
2. Fair wage, real wage and Minimum wage
3. Social security in India
4. Cafeteria style of compensation
5. Compensation Benchmarking

Q2.a. Discuss the various economic and behavioural theories of compensation. Also examine their implications for formulating the reward strategies.

b. Discuss the highlights of seventh pay commission.

Q3.a. Discuss the various steps involved in Job evaluation. State the methods of Job evaluation and explain in detail the process used for establishing job hierarchy in Point Rating method

b. State the difference between Point rating and Factor comparison method of Job evaluation

Q4.a. Discuss the essentialities for job design and explain Job characteristics model in detail.

P.T.O

b. Job analysis has been considered the cornerstone of human resource management. Precisely how does it support managers making pay decisions.

Q5. Restco Products make pillows and blankets specifically for passengers on airlines. For
the past 15 years, profits in the airline industry have been hugely variable, partially because of labour unrest, rising prices and so on. Restco has been tinkering with the other kinds of "nap" opportunities tailored to rest homes and senior citizens in general. This experimentation makes current strategic objectives and goals quite ambiguous. What would be a good compensation mix for the organization given this constellation of factors.

Q6. a. Discuss how Key Performance Indicators and Business metrics can be barometers for assessing the performance of employees

b. Discuss the modern techniques of Performance Appraisal

-END-

Total No. of Pages :03 Roll No. ......

THIRD SEMESTER MBA [Odd]

END SEMESTER EXAMINATION *Nov/Dec-2019*

MGI-04 Data Warehousing and Online Analytical Processing

Time: 3:00 Hours *Max. Marks : 60*

Note: Answer **ALL** questions. All questions carry equal marks.
Assume suitable missing data, if any.

Q.1[a] Attempt any TWO of the following [3+3]

i. What is a factless fact table. Explain with example.

ii. Explain business dimensions. Why and how can business dimensions be useful for defining requirements for the data warehouse?

iii. What is a star snowflake schema? Explain its advantages and disadvantages.

iv. Why are reviews of existing documents important? What can you expect to get out of such reviews?

[b] Create a detailed outline for the formal requirements definition document for a data warehouse to analyse product profitability of a large departmental store chain. [6]

Q.2[a] Attempt any TWO of the following [3+3]

i. Elaborate the basic tasks involved in Data transformation.

ii. The tremendous diversity of the source systems is the primary reason for their complexity. Do you agree? If so, explain briefly why.

iii. Define initial load, incremental load, and full refresh.

iv. Explain the different types of data extractions

[b] You are the staging area expert in the data warehouse project team for a large stationery item manufacturer. Discuss the four modes of applying data to the data warehouse. Select the modes you want to use for your data warehouse and explain the reasons for your selection. [6]

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Q.3[a] Attempt any TWO of the following [3+3]

i. Describe the characterises of strategic information.
ii. Explain any three business scenarios wherein data warehouse can be applied.
iii. Data warehouse is a blend of technologies. Elaborate
iv. Differentiate between OLTP and OLAP systems.

[b] Prepare a table showing all the potential users and information delivery methods for a data warehouse supporting a large national grocery chain. [6]

Q.4[a] Attempt any TWO of the following [3+3]

i. What do you understand by data analytics. Explain using suitable examples.
ii. Explain any 3 analytics techniques used in predictive and prescriptive analytics
iii. Elaborate with suitable examples the link between descriptive, predictive and prescriptive analytics.
iv. Description analytics identifies trends in data and connects dots to gain insights about associated businesses. Examine.

[b] You are an expert in the area of Business analytics. Your company manufactures electrical appliances and is in the process of adopting a BI tool to gain data insights. Discuss the various features you would consider while shortlisting the Business Intelligence tool for your company. [6]

Q.5[a] Attempt any TWO of the following: [3+3]

i. Explain the process of Knowledge discovery in Data Mining.

ii. Define OLAP and explain some of its characteristics..

iii. Explain database access methods.

iv. Define Data Mining. Give reasons why you think data mining is being used in today's businesses.

[b] Your company is the largest producer of milk products, selling to supermarkets, fast-food chains, and restaurants, and also exporting to many countries. The analysts from many offices worldwide expect to use the OLAP system when implemented. Discuss how the project team must select the platform for implementing OLAP for the company. Explain your assumptions. [6]

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*Total No. of Pages _2_* *Roll no.............*

__3rd__ SEMESTER **MBA**

END SEMESTER EXAMINATION ***Nov/Dec-2019***

MGS-01 **SCM & E-COMMERCE**

Time: 3:00 Hours *Max. Marks: 60*

Note : Answer any three out of Question No. 1,2,3 & 4.
Question no. 5 is compulsory.
Marks are indicated along with each question.

Q.1 a) Explain the challenges faced by e-commerce firms in India. (6 Marks)

b) Explain the various types of e-grocery models prevalent. (6 Marks)

Q.2 a) Explain the various customer segmentation strategies for online grocery retailers. (6 Marks)

b) Using an example, describe network externalities and explain the phenomenon of Metcalfe's Law.? (6 Marks)

Q.3 a) Explain the difference between business process automation, business process reengineering and business process improvement. (6 Marks)

b) Explain the advantages of Integrating Brick and Mortar Business with e-Business Operations (6 Marks)

Q.4 a) What is an information system? What are the various types of business information system. (6 Marks)

b) Describe in detail Management Information Systems. (6 Marks)

Q.5 Answer True or False with brief explanation (2 Marks Each)

a) Fundamental difference between an order and delivery is that Order is the flow of product while delivery is the flow of information.

b) A company selling its own products on its own website is an example of Merchant Model.

c) Google AdWords involves auctioning of keywords based on which advertiser websites are listed on Google search page.

d) Infomediary allows buyer and seller to transact on their platform.

e) Transaction processing system has analytical capability.

P.T.O.

f) Sales & Marketing is an example of inter organization business process.
g) Executive Support System provides data input for Management Information System.
h) Netflix entertainment platform is an example of Direct Model.
i) Internet Market Exchanges combines the purchasing power of many buyers to negotiate aggressive discounts.
j) Enterprise Information portal act as company's interface to the publ
k) e-Commerce is a subset of e-Business.
l) Internet can reduce the information asymmetry for a buyer of a product.

END

Total No. of Pages 1 — 37 — Roll No. ......

THIRD SEMESTER MBA

END SEMESTER EXAMINATION *Nov/Dec-2019*

MGS-03 Logistics Planning and Strategy

Time: 3:00 Hours *Max. Marks : 60*

Note: Answer **any five** questions. Assume suitable missing data. Use the attached case study for solving questions.

Q.1 How does the dabbawalla organization achieve its high service performance? What is its secret for success? [12]

Q.2 Why do world-class companies like FedEx study the *dabbawalla system*? What do they expect to learn? [12]

Q.3 For *dabbawalla* what would be a better strategy, to offer services as 3PL or 4PL, if they are to enter into partnership with an organization. Support your answer. [12]

Q.4 Elaborate "*on-time delivery, every time*". Is this a critical aspects of logistics management for an organization? [12]

Q.5 A consultant wants to revamp *dabbawalla system* and proposes several changes. How should Raghunath Medge respond? If he allows him to make changes to the system. Please list specific examples of what you as a consultant would change. [12]

Q.6 Few managers can afford to hire star employees and even if they could, the Performance of those individuals is hardly a sure thing because, as research has shown, stars typically need a strong team in order to flourish. But *dabbawalla system* turns this upside down, where ordinary members are delivering world class performance. Elaborate. [12]

Q.7 Identify and describe various constituents of logistics management as applicable to *dabbawalla system*. [12]

-END-

STEFAN THOMKE
MONA SINHA

The *Dabbawala* System: On-Time Delivery, Every Time

Our ancestors fought in Shivaji's army. Today we fight against time.
— Raghunath Medge, President, *Dabbawala* Organization

Each day throughout the city of Mumbai, India, 5,000 individuals called *dabbawalas* delivered some 130,000 *dabbas* (lunch boxes filled with home-cooked food) to offices throughout the metropolis.[1] In the nearly 120 years of this service, Mumbai had changed enormously, becoming, by 2009, India's financial and commercial capital, housing some 10.5 million people. Yet the *dabbawalas'* approach had remained consistent: a semiliterate workforce (the *dabbawalas*) picked up the filled *dabbas* from the households that prepared them and delivered the boxes to the requisite offices; they then retrieved the empty *dabbas* from these delivery points and returned them to the originating households, in order to begin the process again the next day. By 2008, roughly 260,000 transactions were completed within 6 hours each day, 6 days a week, 51 weeks a year, and operating at a quality level comparable to Six Sigma processes.[2] (See **Exhibit 1** for a quality award and certification.) Moreover, this operational excellence was accomplished in the absence of technology, such as computers or even cell phones. Some customers had been using the service for more than 20 years; some *dabbawalas* had been delivering *dabbas* for more than twice that time.

In recent years, the *dabbawala* system had begun to generate worldwide news, attracting the attention of royalty like Britain's Prince Charles, famous industrialists like Sir Richard Branson of the Virgin Group, and of executives from sophisticated delivery companies like FedEx. It motivated a plethora of books, TV documentaries, and articles. People interested in how the system worked trooped to Mumbai to chronicle the *dabbawalas* in action—celebrating more than "supply chain efficiency," however; the *dabbawalas'* organization was scrutinized, too. It provided lifetime financial welfare and support for all members, who determined their own policies about hiring, logistics, customer acquisition/retention, pricing, and conflict resolution. About 200 groups worked

[1] A literal translation of the word *dabbawala* is "one who carries a box." A *dabba* is a lunch box, while *wala* is a suffix denoting a doer of the preceding word.

[2] Six Sigma is a business management method that seeks to improve process quality through minimizing variability and the identification and removal of error causes. Among its methods is the systematic use of statistics. Using a set of process assumptions, a six-sigma quality level is usually defined as 3.4. defective parts (errors) per million opportunities.

1-38-1

Professor Stefan Thomke and India Research Center Researcher Mona Sinha prepared this case. Thanks to Rachna Chawla, Research Coordinator at HBS India Research Center, for her assistance. HBS cases are developed solely as the basis for class discussion. Cases are not intended to serve as endorsements, sources of primary data, or illustrations of effective or ineffective management. Some names have been disguised.

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synchronously throughout the city, each with a designated area with its own customers, and group members shared equally in the profits their work generated. Groups also elected representatives to a managing committee that, meeting monthly, tackled operational and social issues affecting all *dabbawalas* as well as attempted to resolve difficult issues that could not be resolved at local group levels.

On January 15, 2010, the monthly management committee meeting attended by the heads of the two governing committees of the *dabbawalas*, Raghunath Medge and Sopan Mare, along with adviser Anil Joshi, began by discussing an array of typical organizational and operational issues. Then, after a break, the team took up Joshi's presentation of "future ideas." He wanted to upgrade the *dabbawalas'* website, which he had set up in 2005 using his own funds, to include a payment gateway for online order booking and to start a cell phone texting service for order inquiries, among other possibilities for confronting the challenges the *dabbawalas* and their system were facing.

The English-language website had successfully garnered media, corporate, and academic interest, leading to speaking assignments and attracting small donations. But the site had not substantially increased the delivery service's customer base because the inquiries received were passed on informally by word of mouth and there was no system in place to monitor whether an inquiry reached the appropriate *dabbawalas* and whether conversion to sales materialized. Joshi felt that the "technology aversion" among most *dabbawalas* compounded their challenges. He believed that a more cutting-edge approach to technology could help overcome the current limitations, but the organization remained skeptical.

As he checked his cell phone one last time before rejoining Medge and Mare for the remainder of the meeting, Joshi recalled some of the arguments he had heard before—and would need to counter. These could be summed up by a comment Medge had recently made: "What can technology do when we don't have even regular electricity supply? We are not educated, so we don't know how to use technology. Our philosophy is that serving food is like serving God. We should just focus on delivering *dabbas*."

Background

Around the year 1885, a banker in Mumbai hired a man to pick up a packed lunch from his home, have it delivered to his office, and when the meal was finished return the empty lunch box to his residence so it could be readied for delivery the following day. Mahadev Haji Bache, one of the original deliverymen, saw an opportunity. In 1890 he created a delivery business of some 35 farmers from his village near the city Pune,[3] calling it *dabbawalas* and offering the men a regular annual income for delivering *dabbas* to customers in Mumbai, taking advantage of that city's pioneering railway system. The villagers were primarily descendants of tribal warriors who fought in Chhatrapati Shivaji's[4] army in the seventeenth century. They belonged to the Varkari[5] sect and drew their inspiration from the tactical inspiration and benevolence of this Maratha king. As Raghunath Medge reflected, "Our strength comes from Shivaji and our devotion comes from God."

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[3] Pune is the eighth-largest city in India, located about 75 miles from Mumbai.

[4] Chhatrapati Shivaji Maharaj was the founder of the Maratha Empire in western India.

[5] Varkaris were a Hindu spiritual sect in the states of Maharashtra and Karnataka. The word *varkari* literally means "traveler." The sect was so named because traditionally they traveled hundreds of miles on foot for a holy pilgrimage once a year. Marathas were a blend of the warrior and agrarian classes, spoke Marathi, and generally had their roots in Maharashtra.

Endnotes

[a] http://www.mrvc.indianrail.gov.in/overview.htm.

[b] Mumbai Local Transport—Suburban Railway and Road Transport, http://www.mmrdamumbai.org/projects_mutp.htm.

[c] http://www.mmrdamumbai.org/projects_metro_rail.htm.

Exhibit 7 Letter from Prince Charles to Mr. Medge

BIRKHALL

8th August, 2005

Dear Mr. Medge

My wife and I were deeply concerned to learn of the appalling floods in Mumbai as a result of the catastrophic Monsoon weather. We are particularly distressed by the suffering being endured by so many people in and around Mumbai and wanted the Dabbawallahs to know how much we feel for you all and that our hearts go out to all those whose lives and property have been so cruelly affected by this continuing tragedy.

We send you all our fondest thoughts and heartfelt wishes.

Yours most sincerely

and sympathetically

Charles

Source: Company documents.

Customers

Traditionally, the *dabbawalas* relied on word-of-mouth for acquiring new customers. Their white Mahatma Gandhi caps, distinctive bicycles, and handcarts all served to advertise their service. Their century-plus-old delivery system continued to bring in new customers in a rapidly changing city, as Medge described:

> In Mumbai people of various castes and communities lived together in one society. People cannot eat out for long periods because it is expensive and also bad for health. They want their own regional cuisine. Many people want vegetarian food that is cooked in a meat-free environment. Some people want food without onions or garlic. On certain days some people eat special foods due to religious beliefs. They don't like the food from their office canteens because it is standardized, boring, and not of very good quality.

Sheikh Bashir, a *dabbawala* customer for the past three years, pointed out the constraints that commuters in Mumbai faced, which underscored the relevance of the *dabbawalas'* service:

> We cannot carry our own *dabbas* to work because the trains are too crowded and our water supply is available too late. So our meal is not ready by the time we leave for work. The *dabbawalas* are affordable, always punctual, and we trust them completely. Sometimes we even put phone chargers, bills, et cetera, in the lunch box if these have been forgotten in the morning knowing that it will surely reach the person.

Organization

Originally, one *dabbawala* was in charge of a particular area, hiring 15 to 20 delivery boys who were paid a monthly salary. But in 1983 the *dabbawalas* moved to an owner-partner system based on a profit-sharing model. Loosely coupled groups of about 25 members each, including 2 to 3 people who worked as backups, managed their own finances, customers, and operational activities. Members ranged in age from 18 to 65 years old (there was no formal retirement age). Of the 5,000 *dabbawalas* in Mumbai, only 4 were women; women typically performed administrative functions or carried "special service" *dabbas*—so called because they involved irregular pickup/delivery times or locations and commanded a higher price.

Senior members with about 10 to 15 years of experience were regarded as supervisors (called *muqaddams*). Each group could have one or more supervisors depending on the age composition of the members of that group; by 2009, there were about 635 *muqaddams*, who carried *dabbas* as well as helped troubleshoot, resolve disputes, and oversee coding, sorting, loading/unloading, collections, and payments. In addition, these supervisors would stand for elections to become part of one of the two committees that oversaw the functioning of the *dabbawala* system. Each committee took decisions pertaining to its respective areas of interest, consulting with each other and other senior members either at their monthly meetings or informally. (See Exhibit 2 for the structure of the *dabbawala* organization.) The two committees were: 40

- **The Operational Committee** (Mumbai Dabbe Vahantuk Mandal): Set up in 1890, it was currently headed by Sopan Mare, a veteran *dabbawala*, who was assisted by a general secretary, a treasurer, and six directors.
- **The Charitable Trust** (Nutan Mumbai Tiffin Box Supplier's Association): Established in 1954, it managed three lodging houses at the *dabbawalas'* place of annual pilgrimage. The trust was headed by a president, Raghunath Medge, who was assisted by a general secretary, a

treasurer, and a director. Medge was a third-generation *dabbawala* who started in 1972 and had been part of the management committee since 1992.

Anil Joshi had some college education and had completed a computer course before joining the *dabbawalas* in 2003 as an adviser for information technology and marketing. Being the only fluent English speaker, Joshi was their public face, taking on speaking assignments and conducting guided tours for business executives, students, and media from all over the world. He did not come from any of the small villages the *dabbawalas* originated from and was not a working member of a group, nor did he belong to any one of them.

Observing the financial hardship of the *dabbawalas*, Joshi had in 2005 set up the separate *Dabbawala* Foundation, of which he was the president. The foundation supported individual *dabbawalas* by replacing stolen or damaged bicycles and handcarts (costing $100 and $200, respectively), providing medical support, and supplying needed items (e.g., household appliances) for the families of *dabbawalas*. From 2005 to 2009, the revenues generated from speaking assignments and donations were used by the *Dabbawala* Foundation to support its activities. To simplify the organization, however, the *dabbawalas* decided to discontinue the foundation in 2009, and Joshi once again took on the role of an adviser. Donations and fees collected now were directed toward the upkeep and rebuilding of the lodging houses by the Nutan Mumbai Tiffin Box Suppliers Charitable Trust.

Recruiting and Motivating

New members were recruited from only about 30 villages in and around Pune. New entrants were friends or relatives recommended by existing members and shared the same culture, language, food, and religious beliefs. They were hired on probation for six months, after which they could buy into the business. For those six months trainees were paid a fixed monthly salary of Rs.3,000 ($60), after which they had to invest 10 times the expected monthly income in a group's business to become a member and partner of that group. For example, if a group paid Rs.7,000 ($140) to each member each month, a new *dabbawala* would have to pay Rs.70,000 ($1,400) to become a partner.

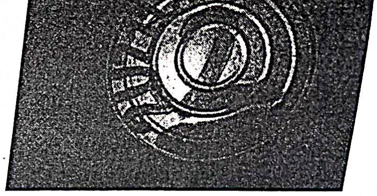
As Medge explained, "Only those who have no education or job come here to become a *dabbawala* and do manual labor." Joshi acknowledged that lack of education resulted in a lack of vision, but he was more concerned about overqualified staff:

> Our people are suitably educated for our job. In fact it is better not to have educated people who would ask too many questions. By the time their questions are answered our uneducated *dabbawala* will finish the task. If people are slightly underqualified for a job they will be eager to learn because they would not have many other job options. Overqualified employees will not be motivated, will not work late, and will want a higher salary. Commitment matters; qualification doesn't.

Trainees learned on the job by being part of a group and assisting with all the activities. According to Joshi, "A retention tool is the emotional unity which results in excellent teamwork. Because of high job satisfaction almost all *dabbawalas* remain in their own groups for their entire working life, and are able to build long-term relationships with customers. This helps them identify problems in the system and find solutions more easily."

Nonperformers were warned and given one or two chances after which, as Medge emphasized, "We throw them out of the team, or we ask him to give his business to some other member of his family." He described their method of enforcing discipline: "We have our own mini-government for meting out punishment or resolving disputes. Justice is swift, fines are imposed, and the involved

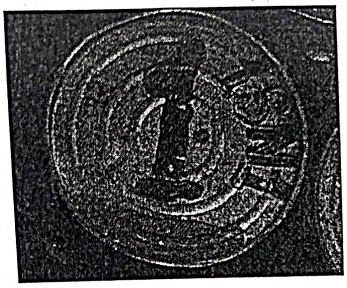
Exhibit 6c Code for Delivery from Thane to Udgar Building in Crawford Market (near CST



Symbol	What Does the Symbol Mean?
2 (center in green color)	2 indicates that the destination is Crawford Market.
2 (edge of lid)	Code of *dabbawala* Mr. Kashinath Gangadhar Bhor at CST station, who will make the delivery. Each *dabbawala* has a unique code at his station of delivery; the number 2 will also be used by other *dabbawalas* at other stations.
U (edge of lid)	Code of destination: Udgar Building.
2 (edge of lid)	Second floor.
11 (edge of lid)	Shop number 11 (the building floor consists of several shops).
Other red symbols after 11	"Thane" written in Marathi language.
Red lines (edge of lid)	Originating station is Thane on Central railway line.

Source: Company interviews.

Exhibit 6b Code for Delivery from Kurla to Sant Building in Ballard Estate (near CST station)



Symbol	What Does the Symbol Mean?
1 (center in green color)	1 indicates that the destination is Ballard Estate. The green color indicates that the origin is a station between Thane and Kurla (Central railway line).
1 (edge of lid)	Code of *dabbawala* Mr. Dadabhau at CST station, who will make the delivery. Each *dabbawala* has a unique code at his station of delivery; the number 1 will also be used by other *dabbawalas* at other stations.
SN (edge of lid)	Code of destination: Sant Building.
1 (edge of lid)	First floor.
Blue lines (edge of lid)	Originating station is Kurla on Central railway line.

Source: Company interviews.

members resume work within a day. Not wearing the white Gandhi cap or drinking alcohol during work hours invites a fine of Rs.100 [$2] and Rs.1,000 [$20], respectively."

Finances

Individual *dabbawalas* were responsible for negotiating prices with their customers, doing so within the pricing guidelines set by management, which factored in the average weight of a *dabba*, the distance between residence and office, and distance between the office and the closest railway station. Members were paid only for the collection of *dabbas*.

Altogether, Mumbai *dabbawala* revenue in 2009 was about Rs.470 million ($9.4 million). On average, Rs.300 ($6) was collected per month from each customer, and, assuming 25 return trips, this worked out to Rs.6 (12 cents) per trip. If a *dabba* were to be delivered by regular courier, customers would have to pay about Rs.85 ($1.70), which made the *dabbawalas'* pricing very competitive. Typically, 10% of *dabbas* were delivered near their originating homes, without having to use the railway. Publicity over the last few years had helped the *dabbawalas* increase their monthly prices by Rs.50 to Rs.100 ($1 to $2). However, Medge did not anticipate significant increases in members' monthly take-home pay because the number of *dabbas* each member could transport was limited.

At the end of the month each group independently calculated its profit (which would be equally shared among the group's members), based on the number of customers the group serviced, the price per customer, and the number of members in the group. In general most *dabbawalas* took home about Rs.7,000 ($140) per month, after deducting expenses, which typically ran to: Rs.200 ($4) for a railway pass, Rs.200 ($4) for a permit to use a train's luggage van, Rs.100 ($2) for bicycle or handcart maintenance, Rs.150 ($3) for miscellaneous costs, and Rs.15 ($0.30) as contribution to the Charitable Trust (Nutan Tiffin Box Supplier's Association). Since the *dabbawalas* used existing infrastructure (railways) and low-maintenance, nonfuel-based transportation (bicycles and handcarts), their operating costs were low. Once a year, customers typically paid them one month's charges as a bonus, but even if some customers refused to do so, the *dabbawalas* continued to serve them.

With little or no education the typical *dabbawalas* had few other job options. Only Medge had a college degree; 15% of the 5,000-member workforce had attended junior high school, while the rest were uneducated.

Operations

After a BBC documentary on Mumbai's *dabbawalas* attracted worldwide attention to how the system worked, Britain's Prince Charles met with the *dabbawalas* when he traveled to India, to understand how they achieved their outstanding service quality. (See Exhibit 3 for photos.) Medge proudly recalled the visit and the *dabbawalas'* amazement at being invited to the prince's wedding in April 2005. He believed that the royal attention was a turning point for his organization because it changed the way society perceived the *dabbawalas* and highlighted their operational expertise. The system became the subject of numerous news reports and documentaries by leading Indian and international television and radio outlets. *Dabbawala* representatives began to address industry and academic forums within and outside India, and shared their insights on managing logistics and people.

The *dabbawalas* continued to be successful in Mumbai because the city's extensive railway network enabled a centipede-like delivery system. Mumbai comprised seven linked islands, covering about 438 square kilometers, that since 1853 had been connected by a railway system considered one of the

—42—

most complex, densely loaded, and intensively utilized in the world.[a] In 2008, it carried 6.4 million passengers daily under extremely crowded conditions: about 4,700 passengers per train during peak hours against a recommended capacity of 1,700.[b] The Mumbai suburban railway system had two zones: Western and Central (including a branch called Harbor). Given Mumbai's largely longitudinal shape, the *dabbawalas* could use bicycles and handcarts to travel the short distances between the railway stations and homes/offices, and the train for large distances in the north-south direction. (See Exhibit 4 for Mumbai's railway network.) The bicycles, specially designed with wide handlebars, a front basket, and a parcel tray behind the seat for hanging or tying the *dabbas* from or to he vehicle, could carry a maximum of 30 to 35 boxes.

A *dabba* typically changed hands four times on a round-trip journey: twice at the railway station origin and twice at the railway station of destination. The process began with each *dabbawala* orting to his designated station in the morning, then cycling to about 30 residences on his fixed e to pick up *dabbas* from each location, and delivering the boxes to the railway station of origin. e they were sorted based on delivery destination. Thereafter, they were taken by trains to the vay station of destination, where they were sorted again and dropped off to individual offices by htime. Soon thereafter the entire process ran in reverse for returning the empty *dabbas* to their inating sites. Within six hours each *dabba* had completed its return journey.

ypical Dabbawala Day

Mr. Dadabhau had been delivering *dabbas* for 35 years. His daily schedule was typical of all *awalas* in Mumbai. (See Exhibit 5 for Mr. Dadabhau's schedule.)

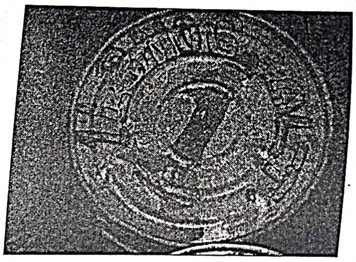
On a regular workday, Dadabhau, who lived in Mulund, a Mumbai suburb on the Central railway e, took the train to arrive at Kurla station, where he unlocked his bicycle and cycled 4 kilometers 5 miles) to the house farthest on his route to pick up his first *dabba*. He had a fixed route and time hedule for collecting his roughly 30 *dabbas*, moving closer to the station with each collection of oxes.

All his customers resided in apartments, as did the majority of people in Mumbai, regardless of income level. Some buildings had elevators and security guards at the gate; others featured only staircases. Dadabhau parked his unlocked bicycle either at the building gate or on the road and did not worry about the safety of *dabbas* hung on his bicycle. Each customer knew the exact time he would arrive. At some places, the *dabbas* were packed and placed near the door of the home or outside the elevator before he arrived. At other residences he rang the doorbell hoping the woman (wife/mother/sister/maid) who prepared and packed the lunch would hand over the lunch box within the allotted time frame of between 30 to 60 seconds per house.

Once at Kurla station, Dadabhau deposited his *dabbas* alongside the 2,000 or so other lunch boxes collected by members of the other two groups operating in Kurla East and West, placing them on the sidewalk they commonly used for sorting. He locked his bicycle and left it leaning against a wall near the station and began to assist his colleagues in unlocking a set of wooden crates (which would house the *dabbas* on their journey to specific locations) and laying them down on the sidewalk. Dadabhau, like the other *dabbawalas*, then moved around to examine the codes on the lids of *dabbas* (discussed in the following section), picking out those that he would take with him for delivery to Chhatrapati Shivaji Terminus (CST) station, a key commercial area on the Central railway route in south Mumbai. That was his delivery route.

Meanwhile, one *dabbawala* who was in charge of delivering *dabbas* locally within the Kurla station area, to schoolchildren and a few storeowners, tied his local delivery *dabbas* on a bicycle and left. As

Exhibit 6a Code for Delivery from Kurla to Laxmi Building in Ballard Estate (near CST station)



Symbol	What Does the Symbol Mean?
1 (center in green color)	1 indicates that the destination is Ballard Estate. The green color indicates that the origin is a station between Thane and Kurla (Central railway line).
1 (edge of lid)	Code of *dabbawala* Mr. Dadabhau at CST station, who will make the delivery. Each *dabbawala* has a unique code at his station of delivery; the number 1 will also be used by other *dabbawalas* at other stations.
LB (edge of lid)	Code of destination: Laxmi Building.
NO6 (edge of lid)	Sixth floor.
I ALIT (edge of lid)	Name of customer (only if customer requests name because of multiple deliveries on the same floor).
Blue lines (edge of lid)	Originating station is Kurla on Central railway line.

Source: Company interviews.

Exhibit 5 Meet Mr. Dadabhau

Age: 65 years

Dabbawala since 1977

Area of operation: Kurla (East)

Typical number of *dabbas* collected from Kurla (East): 28

Typical number of *dabbas* delivered in Ballard Estate and surrounding areas: 25

Residence: Mulund, a suburb on the Central railway line in north Mumbai, approximately 15 kilometers (9 miles) away from Kurla

Mr. Dadabhau's Normal Day	
8:30–9:00 a.m.	Report for work at Kurla (station of origin).
9:00–10:00 a.m.	Pick up *dabbas* from homes.
10:00–10:30 a.m.	Both groups congregate at Kurla with *dabbas* and sort based on destination station.
10:30–10:45 a.m.	Board trains with *dabbas* either in wooden crates or in hand.
10:45–11:30 a.m.	Travel by trains to Chhatrapati Shivaji Terminus (CST; erstwhile Victoria Terminus).
11:30–12:00 p.m.	All CST groups congregate at station and sort *dabbas* based on final office destination.
12:00–1:00 p.m.	Delivery to offices at and around Ballard Estate.
1:00–1:30 p.m.	Lunchtime for the *dabbawalas*.
1:30–2:30 p.m.	Collect empty *dabbas* and return to the destination station; sort based on station of origin.
2:40–3:30 p.m.	Train ride back to station of origin (Kurla).
3:30–4:00 p.m.	Sort the *dabbas* at the station of origin (Kurla).
4:00–5:00 p.m.	Return the *dabbas* to homes.

Source: Company interviews.

this was happening, Dadabhau and his colleagues were filling the crates with *dabbas* headed for their destinations. He and five other members were in charge of three crates with about 40 *dabbas* each. Crates were carried as a "head load" by one or more *dabbawalas* depending on the crate's weight—usually about 60 kilograms (130 pounds)—or several *dabbas* were carried by hand or over the shoulder. (See Exhibit 3 for photos.) Railway stations had no elevators, escalators, or ramps—only stairs to access the platforms.

The *dabbawalas* knew where the train's luggage compartment was and thereby positioned themselves on the platform so they could rush through the door with their crates within the 40 seconds during which the train halted at major stations, or 20 seconds at interim stops. Not only did each station have outgoing and incoming business, but increasingly crowded conditions had led to commuters' storming the luggage compartments even though they were not permitted to do so. For the *dabbawalas*, this meant that loading and unloading at stations usually occurred amid huge jostling for scarce space.

At CST, Dadabhau joined the rest of the groups converging at the station and picked up the *dabbas* he was to deliver to areas in and around Ballard Estate, part of his delivery route. He identified his *dabbas* by the codes on the center of the lids and loaded them onto his bicycle to ride 1 kilometer (0.62 miles) away—about a 10-minute journey. (*Dabbawalas* who serviced areas with a greater number of deliveries used handcarts.) Dadabhau started deliveries beginning from the general post office closest to CST. In some places he had to leave the *dabba* with the security guard, while at others he deposited it at the appropriate floor just outside the elevator gate or at the building's reception desk.

After delivering the lunch boxes, Dadabhau and his colleagues returned to CST, ate their lunches (packed in their own specially marked *dabbas*), and then began collecting the empty lunch boxes, starting with the offices farthest from the station. Once the empty *dabbas* were back at CST, they were again sorted according to the codes indicating the station of origin. This part of the journey was more relaxed because the *dabbas* were not as heavy, the trains were not as crowded, and the return delivery time was more flexible.

Dadabhau and his colleagues, now gathered back at Kurla station, met with the other groups and picked up their *dabbas* from memory; Dadabhau knew the look and destination of all of his lunch boxes by heart. He then delivered the *dabbas* back to customers' homes on his bicycle, this time starting from the residence closest to the station. This was the time he interacted with his customers, providing/receiving information about changes or issues in pickup/delivery, and collecting the monthly fee. Medge explained the importance of building and maintaining customer relationships: "If we don't provide reliable and punctual service, or if the railways go on strike, then customers will get accustomed to carrying their own *dabbas* and our 120-year-old business will close down." Customer satisfaction, it was believed, came from on-time delivery, every time, of lunch boxes and their return at the end of the day.

Coding System

The "warriors of the road," as the *dabbawalas* liked to call themselves, had no written records of customers' home addresses. They attributed their speed and accuracy to the efforts of Medge's grandfather, who had institutionalized "time management tactics," a code of ethics, a sense of discipline, and, crucially, a simple yet comprehensive system of identification codes based on colors, well-known symbols, and characters that were universally identifiable. The use of these basic visual cues, it was estimated, fundamentally contributed to the *dabbawalas'* 2008 error rate, which was an impressive 1 error in 6 million deliveries. It also allowed for a hub-and-spoke distribution system, in which railway stations served as central sorting and distribution points (hubs) and each station had *different delivery routes (spokes). Similar models had been pioneered by airlines in the 1950s and adopted by FedEx for overnight delivery in the 1970s. The dabbawala system had relied on such a distribution model since its inception nearly a century earlier.*

Thus, Dadabhau, like his colleagues, relied on the codes marked on dabbas to identify which ones he would carry to CST and then to Ballard Estate, as well as for returning back to Kurla and also participating in the sorting processes that were part of his work. (See Exhibits 6a through 6c for the coding system for Dadabhau's daily schedule.) These codes didn't contain all the information to make a delivery; any information gaps were filled by years of experience and the dabbawalas' excellent memory.

The code on the lid of each *dabba* had three main symbols. First, the large and bold number in the center indicated the neighborhood where lunch boxes had to be delivered. Each destination station served several neighborhoods. (For example, Ballard Estate's code was 1, while Crawford Market's code was 2, and both were served from CST railway station.) The *dabbawalas* knew the neighborhoods (and the codes) that fell under the purview of each destination station.

Second, on the lid edge was a group of codes: a numerical code for the *dabbawala* who would make the delivery, followed by a two- or three-letter alphabetical code for the building name and a number indicating the floor where the *dabba* was to be delivered. (At times, customers requested their names painted on the lunch box if there were many lunch boxes delivered to the same floor.)

Third, another symbol on the lid edge—a combination of colors, motifs, or shapes—indicated the station of origin. Each group created its own symbol of color codes. For example, the Kurla (East) group had chosen a blue line on the edge of the lid, while the Thane group had chosen a red line plus the word *Thane* written in the local language of the region, Marathi. At the end of the day, all lunch boxes ended up at their original railway station, where the *dabbawalas* would pick out their lunch boxes and return them to customers.

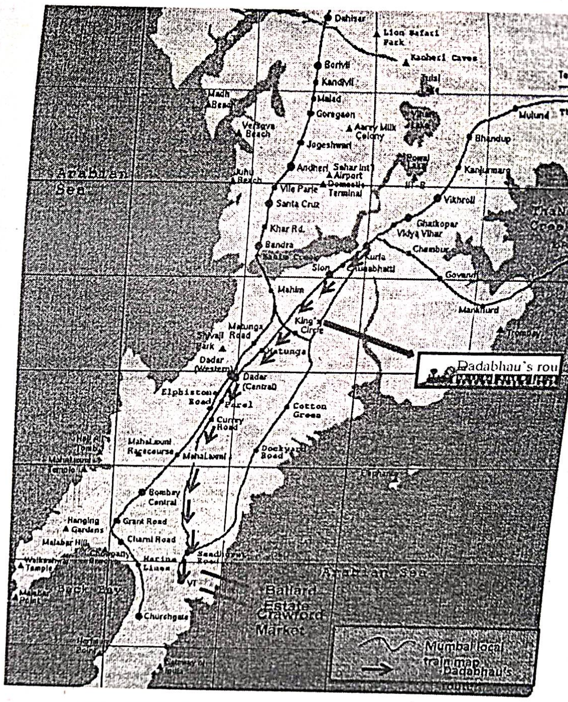
Increasing Complexity

For all the *dabbawalas'* ability to provide steady, speedy, and accurate delivery, those who addressed overall *dabbawala* system concerns were aware of how changing contextual factors influenced, and would continue to affect, their work. At the local level, someone providing a *dabba* might not have her lunch box ready—for any number of reasons; there could be, as well, citywide disruptions. Thus, given the split-second precision of the system, a single delayed lunch box could result in a cascading effect that would impact thousands of *dabba* deliveries.

The *dabbawalas* had built in buffers by having two or three extra workers per group. All members were cross-trained in all activities (e.g., collecting, sorting, transportation, finance, customer relations). Yet the pressure did build. For one thing, the number of vehicles in Mumbai had mushroomed, growing from 61,000 in 1968 to more than 1.02 million by 2008.[c] The city's worsening traffic, in turn, had an impact on handcart use, increasing the use of bicycles. "Handcarts have become difficult to maneuver," Joshi noted.

Accompanying the increase in the number of vehicles throughout the city, roads were endlessly being dug up and potholes were omnipresent (and endlessly being filled), which posed particular problems during monsoon season. In consequence, *dabbawalas* often had to cover the same distance by running with their handcarts or by cycling faster. And with a bicycle loaded to full capacity of about 25 to 30 *dabbas*, slung across the handlebars or attached to the back carrier, maneuverability was also limited. Many deliverymen, including Dadabhau, never stopped at red lights, went the

Exhibit 4 Mumbai's Extensive Local Railway Network (runs mostly north–south)



Note: VT is the old name of Chhatrapati Shivaji Terminus (CST).

Source: Courtesy of the University of Texas Libraries, The University of Texas at Austin, http://www.lib.utexas.edu/maps/map_sites/cities_sites.html.

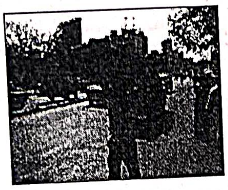
This document is authorized for use only in Dhiraj Kumar Pal's Course MGS-03 Logistics Planning and Strategy 11.15.2019 at Delhi School of Management from Nov 2019 to M

Exhibit 3 *Dabbawalas* in Action

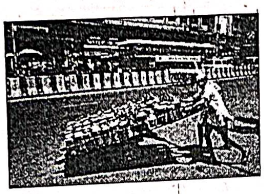
Prince Charles' Visit to Mumbai

Sir Richard Branson's Visit

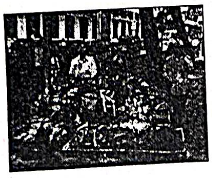
Wooden Crate Near Train Station



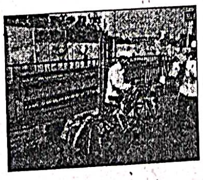
Pushing Handcarts



Fully-Loaded Cart



Fully-Loaded Bicycle



Source: Company documents.

wrong way into one-way streets, and often rode their bicycles on the sidewalk (if there were sidewalks at all). At the railway stations, to save time *dabbawalas* sometimes crossed the railway tracks instead of climbing up to the overhead bridge to get to the platform. Such actions were dangerous and at times generated fines.

Meanwhile, given increased security concerns, particularly after the terrorist attacks on the city in late November 2008, *dabbawalas* had to "verify" new customers more carefully. Medge explained: "We don't accept *dabbas* from people not having a permanent address in Mumbai. They may be terrorists and may have bombs in the lunch boxes. For the first few deliveries we open and check the *dabbas*, which we never had to do before." Apart from their own security checks, increased security at their delivery destinations often complicated a down-to-the-second delivery schedule. As Kishankari Vaidya, a *dabbawala* since 1948, noted:

> Earlier we would hand over the *dabba* directly to the consumer or at least drop it off outside the elevator door on each floor. Now we can't enter many buildings, so we have to leave the *dabba* with the security guards. So *dabbas* can get lost and customers have to come down to the security area to pick up and drop off their *dabba*. Sometimes the guards open our *dabbas* to check, and this increases our time for pickup/delivery. We try to tell the security people that we are trustworthy, but it doesn't [always] work.

A proof of such trustworthiness and, indeed, inspiration was found in the actions the *dabbawalas* took in July 2005. Unusually heavy monsoon rains combined with record high tides wreaked havoc in Mumbai. As the water level rose, vehicles and people were stranded in many places in almost waist-high water. Like their Mumbai customers, many of the 5,000 *dabbawalas* remained stranded in trains, at railway stations, and on sidewalks for two days. Medge himself was on a train with 10 other *dabbawalas*, returning with empty *dabbas*. They saw commuters jump down onto the railway tracks from the train to wade through the water. He recalled thinking, "We can't leave without the *dabbas* and we can't avoid the ditches and potholes while wading through the water with heavy crates on our heads." On the second day even before the city limped back to life, the *dabbawalas* waded through two feet of water and delivered the *dabbas* back home, reflecting their deep commitment and work ethic. Amid the despair of loss of life and property, the *dabbawalas* symbolized the resilience and spirit of Mumbai. Concern for their welfare came from friends and supporters all over the world. (See Exhibit 7 for a letter to Medge from Prince Charles.)

Experimenting with the System

Anil Joshi believed that the flat organizational structure the *dabbawalas* had evolved into enabled quick decision making should variances—like the monsoon extremes of 2005—occur; but he acknowledged the role of commitment in actually minimizing variability:

> A *dabba* getting lost depends on the level of commitment. If you treat the *dabba* as a container, then you may not take it seriously. But if you think this container has medicines that must reach patients who are ill and may die, then the sense of urgency forces commitment. We treat our *dabbas* with that same sense of urgency.

That notion was a core operating principle, yet it lent itself to various experiments over the decades, and these had in fact led to changes in how the *dabbawalas* worked. But for all these attempts at, and institutionalizing of, change, there still was a deep conviction that the basic approach was both coherent and unique and even that it had *not* changed over the decades. Joshi put it this way: "Some people tell us to cook food, or have our own transport system. But we never deviate from our

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core mission. We focus only on delivering dabbas to our customers. We don't approach customers with unsolicited offers like buy one dabba, get one free. Customers will discontinue our service if we bother them."

More broadly, the *dabbawala* organization tended to deflect some often-proffered suggestions. Raghunath Medge juxtaposed one "reasonable" idea with the reality of the *dabbawala* life:

> *Some business school students examined our system and suggested we use motorcycles instead of bicycles. But then our people would have to learn how to use them, get driver's licenses, deal with the Regional Transport Office [like a department of motor vehicles in the U.S.], and costs would increase for the customer. With handcarts and bicycles we have less tension, less investment, and no pollution.*

Another idea often raised was expanding beyond Mumbai. But no other city in India had such a comprehensive railway network, and the *dabbawalas'* delivery expertise was anchored to trains. Delhi, for instance, had a rail system that was circular and spaced out, unlike the densely populated, longitudinal landscape of Mumbai. There was also a worry that recruiting outside their traditional network might threaten the level of cooperation and teamwork the *dabbawalas* prided themselves on. They did, however, willingly allow entrepreneurs from other cities, such as Bangalore, to try to replicate the system elsewhere. Many of these entrepreneurs were highly educated managers from the corporate world who were given free access to the *dabbawala* system for observation and learning.

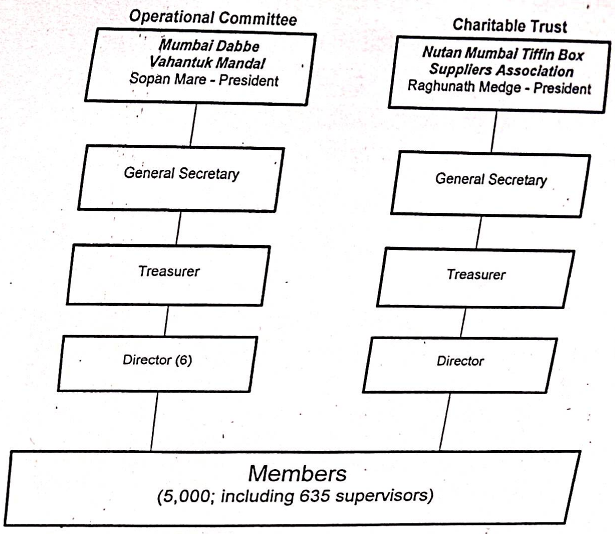
Changing the appeal of the delivery work and whom it could be targeted to had also been introduced as a matter for consideration. There were increasing numbers of educational and professional opportunities in Mumbai, and the potential for turnover—something almost unheard of in the past. Some candidates would train for the job but then leave when better opportunities came their way.

Meanwhile, the *dabbawalas* faced changes in the preparation of the meals they were to pick up and deliver. In particular, the increase in nuclear rather than extended family units and the exploding number of women joining the workforce resulted in fewer people being available to cook lunch in the mornings (traditionally a woman's domain in India). To serve customers who preferred home-cooked meals but needed to outsource the cooking itself, the *dabbawalas* had begun to collaborate with small companies/canteens that provided general foods; they had even expanded to include specialized offerings such as low-calorie diets and regional cuisine. Further, they had permitted customers to use thermos-style *dabbas* instead of the traditional aluminum *dabbas*, as long as the dimensions were similar. At the same time, the *dabbawalas* rejected suggestions for backward integration (i.e., for setting up their own kitchens); their expertise was in delivery.

Finally, there was the issue of whether the service should deliver more than lunch. Several attempts had been made. In 2007, Joshi connected with a few companies (e.g., Microsoft and Hindustan Unilever) to have the *dabbawalas* deliver advertising brochures to offices along with the *dabbas*, something that would add the equivalent of a couple of cents of revenue per lunch box. Dabbling in the entertainment world, the *dabbawalas* had even donned masks during a "delivery-day" show to promote a TV program. They had experimented with distributing product samples along with the *dabbas*. The money collected for this work (like that for delivering the brochures) was distributed among the group members in areas where deliveries were made.

The organization faced several problems in taking on these additional tasks and roles. The extra time needed (e.g., for attaching the flyers or samples to boxes, as well as keeping the sorting process accurate) threw their system out of gear, particularly during monsoon season or when dealing with

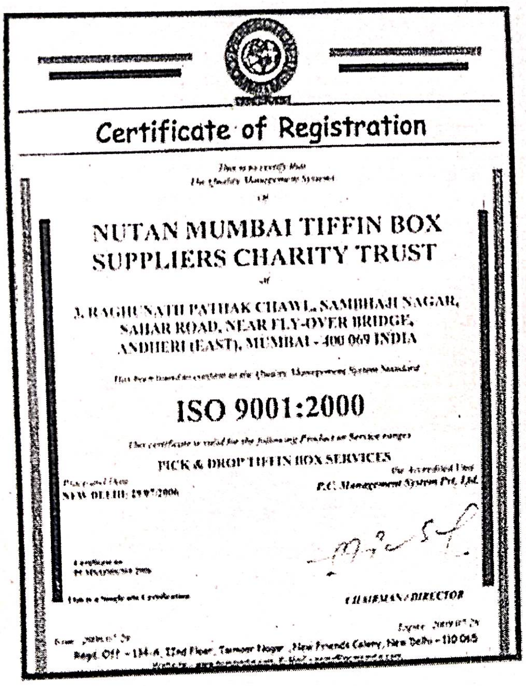
Exhibit 2 The *Dabbawala* Organization



Source: Company documents.

This document is authorized for use only in Chirag Kumar Pal's Course MGS-03 Logistics Planning and Strategy 11.15.2019 at Delhi School of Management from Nov 2019 to May 2020.

Exhibit 1b ISO Quality Certification of the *Dabbawala* System



Source: Company documents.

normal variability (rail strikes, road repairs, etc.). Members protested when this happened. Also, given increased security concerns, if *dabbas* had to be left behind at the security gate of buildings, there was no way of ensuring that the advertising materials would actually reach the customers, creating billing issues. Moreover, the *dabbawalas*, being mostly illiterate, faced difficulty in collecting payments from smaller and unreliable clients, who were also interested in piggybacking on the famed delivery service. Increasingly, companies large and small had begun to approach the organization, and one or two projects were undertaken each month. Prices were quoted based on the complexity of the task and the number of *dabbawalas* involved. Projects that would likely upset the *dabbawalas'* delivery schedule were rejected. Typically companies approached Joshi for such promotions, and he made these decisions along with Sopan Mare, Raghunath Medge, and the supervisors of those groups who would be involved in that promotion program.

Finally, the *dabbawala* organization had been forced to confront technology in multiple guises. A sophisticated city like Mumbai was awash in cell phones,[6] not to mention computer access of every type. To date, Joshi's website, set up in 2005, had generated inquiries for lectures and interviews, but it could not be used for booking deliveries or placing orders. He was about to take on the issue again in the ongoing meeting with his colleagues.

The January 15 Meeting

The managing committee had finished up its discussion of routine organizational and operational matters and, after a break, was poised to turn to Anil Joshi's presentation of some future issues, in particular technology. The men would then discuss these matters and, Joshi hoped, make some decisions. As he mentally rehearsed his proposals, Joshi considered how he might, once again, make his case as well as counter objections that would probably arise. The technology discussion was a familiar one to this group. He thought he knew how his colleagues would respond.

A good opening point, Joshi believed, would be proposing that the English-language website be upgraded to include a payment gateway to facilitate Internet-based order booking. The site now featured products such as *dabbas*, mugs, T-shirts, Gandhi caps, and a CD documentary of the *dabbawalas'* operations, all of which could be purchased by mailing in a check. With a payment gateway, however, the website could generate regular income or even grow the business instead of serving mostly as a publicity portal. That is, the site could also help manage sales-related activities, collect payments, and improve marketing, customer service, and overall support. Joshi had read about simple Customer Relationship Management systems that were widespread in the business world.

While the committee members might be reluctant to embark on this approach to how deliverymen would be paid and customer relationships managed, Joshi hoped that they could be persuaded that the value of doing so was to the overall system's benefit—that it might preserve the *dabbawalas'* uniqueness. He also planned to propose a cell-phone-based text messaging service for order inquiries, again to keep the commitment to service alive.

But he knew that in general, the *dabbawalas* were not convinced that these technological suggestions, even in the guise of "customer enhancements," would in fact benefit themselves. The economic realities, at a minimum, made those extensions difficult, Joshi realized, as much as he wished them to be gone. Many employees did not own cell phones (much less computers), and the few who did used them sparingly to minimize costs; for most *dabbawalas*, mastering a technology was

[6] In May 2009, Mumbai had 22.5 million cellular subscribers (http://www.knowindia.net/telecom.html).

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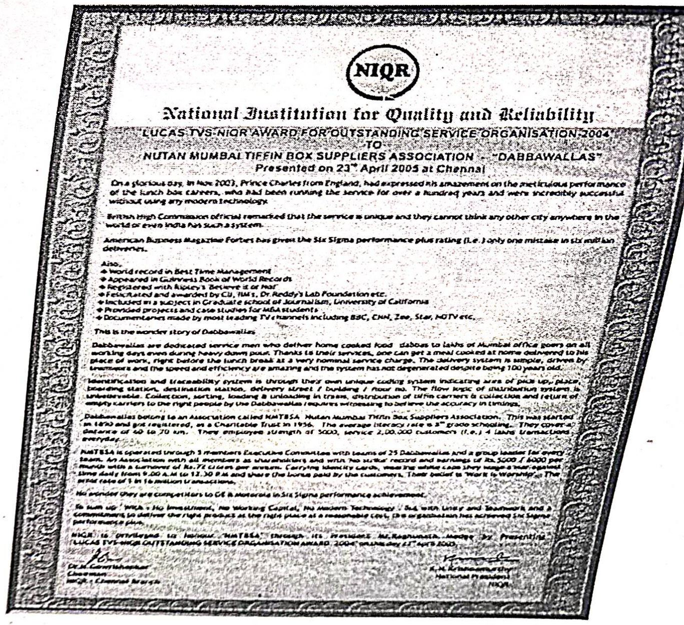
inconceivable (even though they mastered the intricacies of their daily work). The bottom line, however, was that even if handset costs were covered through donations, the monthly bills for cell service remained unaffordable to most.

Also, as others had pointed out before, there was not even a list of all 5,000 *dabbawalas* (or their customers), much less ways of supporting or training them. Would Joshi's proposals necessitate a technology support group? Who would pay for it? Joshi thought he could tie up with some cell phone provider for getting free cell phone usage for group supervisors. Moreover, since most members were uneducated, he also wanted to tie up with a nongovernmental organization (NGO). The NGO could provide free classes in English and Hindi to develop basic skills such as reading and writing simple text messages.

A rapidly expanding cell phone network, Joshi thought, would enable online order booking and cell-phone-based text inquiry systems, both opportunities that could be powerful and inevitable. The *dabbawalas'* system might benefit financially through new customer acquisitions and service innovation, and possibly remain at the leading edge of very low-cost, high-quality supply chain systems. After all, if world-class companies like FedEx showed so much interest in the *dabbawalas'* system, they must be doing something right. Right?

Exhibit 1a Quality Award for the *Dabbawala* System



NIQR

National Institution for Quality and Reliability

"LUCAS TVS-NIQR AWARD FOR OUTSTANDING SERVICE ORGANISATION-2004"

TO

NUTAN MUMBAI TIFFIN BOX SUPPLIERS ASSOCIATION - "DABBAWALLAS"

Presented on 23rd April 2005 at Chennai

On a glorious day, in Nov 2003, Prince Charles from England, had expressed his amazement on the meticulous performance of the lunch box carriers, who had been running the service for over a hundred years and were incredibly successful without using any modern technology.

British High Commission official remarked that the service is unique and they cannot think any other city anywhere in the world or even India has such a system.

American Business Magazine Forbes has given the Six Sigma performance plus rating (i.e.) only one mistake in six million deliveries.

Also,
- World record in Best Time Management
- Appeared in Guinness Book of World Records
- Registered with Ripley's 'Believe it or Not'
- Felicitated and awarded by CII, IIM's, Dr. Reddy's Lab Foundation etc.
- Included in a subject in Graduate school of Journalism, University of California
- Provided projects and case studies for MBA students
- Documentaries made by most leading TV channels including BBC, CNN, Zee, Star, NDTV etc.

This is the wonder story of Dabbawallas

Dabbawallas are dedicated service men who deliver home cooked food dabbas to lakhs of Mumbai office goers on all working days even during heavy down pour. Thanks to their services, one can get a meal cooked at home delivered to his place of work, right before the lunch break at a very nominal service charge. The delivery system is simple, driven by teamwork and the speed and efficiency are amazing and the system has not degenerated despite being 100 years old.

Identification and traceability system is through their own unique coding system indicating area of pick up, place, boarding station, destination station, delivery street / building / floor no. The flow logic of distribution system is unbelievable. Collection, sorting, loading & unloading in trains, distribution of tiffin carriers & collection and return of empty carriers to the right people by the Dabbawallas requires witnessing to believe the accuracy in timings.

Dabbawallas belong to an Association called NMTBSA Nutan Mumbai Tiffin Box Suppliers Association. This was started in 1890 and got registered, as a Charitable Trust in 1956. The average literacy rate is 8th grade schooling. They cover a distance of 60 to 70 km. Their employee strength of 5000, service 2,00,000 customers (i.e.) 4 lakhs transactions everyday.

NMTBSA is operated through 3 members Executive Committee with teams of 25 Dabbawallas and a group leader for every team. An Association with all members as shareholders and with 'no strike' record and earnings of Rs.5000 / 6000 per month with a turnover of Rs.72 crores per annum. Carrying identity cards, wearing white caps they wage a war against time daily from 9.00 A.M to 12.30 P.M and share the bonus paid by the customers. Their belief is 'Work is Worship'. The error rate of 1 in 16 million transactions.

No wonder they are competitors to GE & Motorola in Six Sigma performance achievement.

To sum up "With - No Investment, No Working Capital, No Modern Technology", But with Unity and Teamwork and a commitment to deliver the right product at the right place at a reasonable cost, this organisation has achieved Six Sigma performance plus.

NIQR is privileged to honour "NMTBSA" through its President Mr.Raghunath Medge by Presenting "LUCAS TVS-NIQR OUTSTANDING SERVICE ORGANISATION AWARD 2004" on this day 23rd April 2005.

Dr.M. Gowrishankar
Chairman
NIQR - Chennai Branch

K.M. Krishnamurthy
National President
NIQR

Source: Company documents.

Total No of Pages: 10 — Roll. No...................

ODD SEMESTER — **Ph.D.**

END SEMESTER EXAMINATION — **December- 2019**

SM-901

RESEARCH METHODOLOGY

Time: 03:00 Hours — **Max.Marks: 70**

Note:

- The question paper consists of Ten Modules (A-J). ***Module A is compulsory for all.***
- The Candidates should attempt two more modules (from B to J) as per their registration.
- The instructions for each module are given separately. In all, 7 questions are to be attempted (3 from Module A & 2 each from other two Modules from B to J).
- Module A should be attempted on main answer sheet.
- ***Other two Modules (from B to J) should be attempted on two other answer sheets clearly indicating the name of module, Roll no. & Name of Candidate on Cover Page of each answer sheet.***

Standard normal table is to be provided.

Module- A: Introduction

(Common to All, Total Marks of this Module: 28)

Attempt Three Questions out of four in this module including Question no.1 which is COMPULSORY.

Q1. Answer the following:

i. Explain the different steps involved in a research process emphasizing the significance of each step.

ii. Differentiate between Descriptive and Conclusive research design with examples. **[5 + 5= 10]**

Q2. Answer the following:

i. A random variable has a normal distribution with standard deviation = 10. If the probability that the random variable will take on a value more than 82.5 is 0.8212, what is the probability that it will take on a value less than 58.3? [3]

ii. 'Collecting good data is the foundation on which you gather evidence and make sense of it.' Discuss the relevance and types of qualitative and quantitative types of data in view of this statement. [6]

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with the help of suitable examples.

Q4. Differentiate between following:

i. Cluster Sampling and Stratified Sampling

ii. Type I and Type II errors in the context of Hypothesis Testing

iii. Quantitative and Qualitative Research Design [3x3 = 9]

Module B : Statistical Analysis
(Total Marks of this Module:21)

Attempt Two questions out of Three in this Module. Statistical table may be used.

Q5. From the following data obtain the estimate of X for Y=70 using linear regression analysis: [10.5]

X	65	66	67	67	68	69	70	72
Y	67	68	65	68	72	72	69	71

Q6. What is hypothesis testing? Describe the types of errors which arise in testing. In two large populations there are 30 and 25 percent respectively of blue-eyed people. Is this difference likely to be hidden in samples of 1200 and 900 respectively from the two populations? [10.5]

Q7. The proportion of blood phenotypes A, B, AB and O in a population are expected to be 0.41, 0.10, 0.04 and 0.45 respectively. However a random sample of size 200 from this population gives the following data:

Phenotypes	A	B	AB	O
No. of units	89	18	12	81

Test the 'goodness-of-fit' of these blood phenotype proportions at $\alpha = 0.05$. It is given that at 5% level $\chi_3^2 = 7.82$, $\chi_4^2 = 9.5$ and $\chi_5^2 = 11.07$. [10.5] "counter-example", later fixed by the introduction of the notion of uniform continuity.

Identify the elements of aesthetics in interpretation of results in computational thinking, technique and intellegence for the theoretical exposition of the problem definition for a system of equations or steps for a problem of your research. [10.5]

Q10. a) Some supercomputers where divide unit is missing because divide operation takes many clock cycles. Suggest using computational technique how such super computer will perform division in steps to find inverse of 90 using Newton-Raphson method.

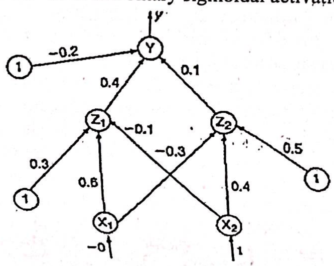
b) Identify a set of parameters in selecting a topic for registration of PhD. problem. What would be modalities in validationg your hypothesis using computaional intellegence? What should be desired effects of quality and research policies? [10.5]

MODULE D : Soft Computing
(Total Marks of this Module:21)
Attempt Two questions out of Three in this Module.

Q11. (a) Explain with neat diagram Supervised, Unsupervised and Reinforcement learning in NN. [3]

(b) Explain the training of Radial Basis Function Network algorithm with the help of flowchart. [3]

(c) Using back-propagation network, find the new weights for the network shown below. It is presented with the input pattern [0, 1] and the target output is 1. [4.5]
Use a learning rare $\alpha = 0.25$ and binary sigmoidal activation function.



Q3. Explain the relevance of interviewing method on the Questionnaire design

b) What is the significance of cross-tabs and when is it used? [4]
c) When does a researcher use ANOVA over T-tests? What type of independent and dependent variable/es are a pre-requisite for ANOVA? [4.5]

Q22.
a) How the various types of variables are defined in SPSS? Explain the variables using suitable examples? [5]
b) Differentiate between Parametric and Non-Parametric tests in the context of SPSS. Which types of tests provide better understanding of the situations? [5.5]

MODULE H : RESEARCH IN ENGLISH LITERATURE
(Total Marks of this Module:21)
Attempt Two questions out of Three in this Module.

Q23. Show your acquaintance with <u>any two</u> of the following: [10.5]

a) Implication of theoretical basis in research in literature
b) Content analysis
c) Literature review
d) Research questions

Q24. What do you mean by 'research problem'? Bring out the implication of the terms: **Identification** of research problem, **Defining** of the research problem and **Formulation** of the research problem. [10.5]

Q25. Write a research proposal on the tentative subject of your choice. Include the essential details therein. [10.5]

MODULE I : DOCUMENTATION STYLE
(Total Marks of this Module:21)
Attempt Two questions out of Three in this Module.

Q26. Show your acquaintance with <u>any two</u> of the following: [10.5]

a) Structure of a thesis
b) Distinction between MLA and APA Style of documenation
c) Chronological Order of Bibliography
d) Chapterization of a thesis

Q27. What do you mean by annotated bibliography? Illustrate your answer. [10.5]

Q28. Arrange the following according to APA style of documentation: [10.5]

a) C. Muralikrishna and Sunita Mishra/Pearson/2011/Chennai/Communication Skills for Engineers
b) Editor: K. Satchidanandan/Gestures: Poetry from SAARC Countries(Container)/ Kunwar Narayan: The Key to Success(Source)/2007/ Sahitya Akademi/Delhi

MODULE J : ETHNOGRAPHY

(Total Marks of this Module:21)

Attempt Two questions out of Three in this Module.

Q29. Discuss similarity and differences between 'Ethnographic Research' and 'Case Study' method of research with suitable example. [10.5]

Q30. How will you use Ethnographic method in your area of research? Discuss with suitable example. [10.5]

Q31. Whether Social Media may be considered as source of information in the Ethnographic Research. Argue. [10.5]

END

Module C : Computational Techniques

(Total Marks of this Module:21)

Attempt Two questions out of Three in this Module.

Q8. Define the domainion of education, knowledge, exploration and intellegence with evaluation of natural, comutational, milletry and artificial intellegence in research and its validation (NI, CI, MI, AI in RI). [10.5]

Q9. The computational technique has evolved in to the process of formulation of problem for the theoretical expositions discussed during the course of research methodology:

In his book Cours d'Analyse Cauchy stressed the importance of rigor in analysis. Rigor in this case meant the rejection of the principle of generality of algebra (of earlier authors such as Euler and Lagrange) and its replacement by geometry and infinitesimals. Cauchy was "the man who taught rigorous analysis to all of world'. The book is frequently noted as being the first place that inequalities, and arguments were introduced into Calculus. Cauchy defined continuity as follows: The function f(x) is continuous with respect to (x) between the given limits if, between these limits, an infinitely small increment in the variable always produces an infinitely small increment in the function itself. The École mandated the inclusion of infinitesimal methods against Cauchy's better judgement. When the portion of the curriculum devoted to Analyse Algébrique was reduced in 1825, Cauchy insisted on placing the topic of continuous functions (and therefore also infinitesimals) at the beginning of the Differential Calculus. Cauchy continued to use infinitesimals in his own research as late as 1853. Cauchy gave an explicit definition of an infinitesimal in terms of a sequence tending to zero. There has been a vast body of literature written about Cauchy's notion of "infinitesimally small quantities", arguing they lead from everything from the usual "epsilontic" definitions or to the notions of non-standard analysis. The consensus is that Cauchy omitted or left implicit the important idea to make clear the precise meaning of the infinitely small quantities he used. He was the first to prove Taylor's theorem rigorously, establishing his well-known form of the remainder. He wrote a textbook for his students at the École Polytechnique in which he developed the basic theorems of mathematical analysis as rigorously as possible. In this book he gave the necessary and sufficient *condition for the existence of a limit in the form that is still taught. Also Cauchy's well-known test for absolute convergence stems from this book: Cauchy condensation test. In 1829 he defined for the first time a complex function of a complex variable. In spite of these, Cauchy's own research papers often used intuitive, not rigorous, methods; thus one of his theorems was exposed to a*

[b] Let the relation between input and output discussed in 3[a] is given by following hypothesis: [5.5]

$$h(x_i) = w_0 + w_1 x_i, \quad i = 1, 2, \ldots, m$$

Where $h(x_i)$ is predicted value at point x_i, w_0 and w_1 are parameters. Note that $\mathbf{X} = [x_1, x_2, \ldots, x_m]^T$ and $\mathbf{W} = [w_0, w_1]^T$. Let a column vector **H** of size m x 1stores all predicted values. Then

$$\mathbf{H} = [1, \mathbf{X}]\mathbf{W}$$

Write MATLAB program (shortest) to generate vector **H.**

MODULE F : BIOTECHNOLOGY

(Total Marks of this Module:21)

Attempt Two questions out of Three in this Module.

Q17. Copying of research stuffs are not advisable, and treated as a criminal offence, why? Describe the ethical issues related to plagiarism along with conflict of interest and competing interest. [10.5]

Q18. Describe the technique of polymerase chain reaction (PCR). What are the different limiting factors in PCR reaction? What do you mean by HOT-start PCR? [10.5]

Q19.How would you extract DNA, RNA and Protein from a tissue chunk? Explain the different methods of gene delivery in a suitable host system. [10.5]

MODULE G : DATA PROCESSING AND INTERPRETATION

(Total Marks of this Module:21)

Attempt Two questions out of Three in this Module.

Q20.

a) The T test tells you how significant the differences between groups and if those differences could have happened by chance. Do you agree with the statement? Justify your answer. [3]

b)Explain the various types of T-tests and their application using SPSS software. [7.5]

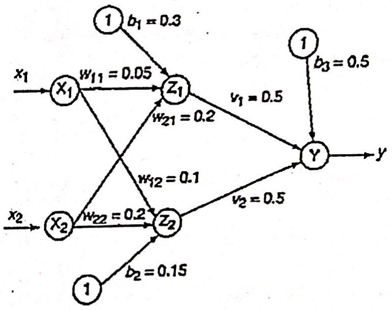
Q21.

a) Explain the term degree of freedom? [2]

Q12. (a) Explain the basic features of the membership functions with diagram. Write short note on fuzzyfication and defuzzification methods. [6]

(b) Using Madaline network, implement XOR function with bipolar inputs and targets. Assume the required parameters for training of the network. The training pattern for XOR is given in table below. [4.5]

x1	x2	1	t
1	1	1	-1
1	-1	1	1
-1	1	1	1
-1	-1	1	-1



Q13. (a) Draw the flowchart for Genetic Algorithm. What the various types of selection, crossover and mutation techniques? [6]

(b) Design a Hebb net to implement OR function (consider bipolar inputs and targets). The training pair for the OR function is given in Table below. [4.5]

55

1	1	1	1
1	-1	1	1
-1	1	1	1
-1	-1	1	-1

Module E: MATLAB

(Total Marks of this Module:21)

Attempt Two questions out of Three in this Module.

Q14. Identify, whether the following statements are True/False. If required, give one-line reason to support your answer

[a] Given a random real number X, the absolute value of the difference between floor(X) and ceil(X) must be 1. [1]

[b] It is possible for a function to call itself within the body of its code. [1]

[c] MATLAB variable name must begin with a letter. [1]

[d] The following code of MATLAB will plot sine curve with respect to x in the range [0, 1000]. [1.5]

```
x = 0:1000;
y = cos(x);
plot(x, y);
```

[e] The MATLAB statement x = [2,8,4;3,0,11;1,9,1]'will create the inverse of matrix u = [2,8,4;3,0,11;1,9,1], and store in variable x. [1.5]

[f] A cell array can store elements with different datatypes and different lengths. [1]

[g] The MATLAB function x= linprog(f, A, b) solves min f'*x such that A*x ≤ b. [1.5]

[h] A function's workspace shares the same workspace as the command window. [1]

[1]

Q15. Answer any *TWO* of the following

[a] Consider the following equation: [5.5]

$$F = G\frac{m_1 m_2}{r^2}$$

Where G is a constant equal to $6.673\text{x}10^{-11}$, and m_1, m_2, and r are all arrays of size n by 1. Write a function to calculate F. Also indicate whether F is column vector, row vector, or a matrix.

[b] Consider the following 5 lines of code entered in the MATLAB command window: [5]

```
X = [7 7 7 7];
Y = 6:9;
W = 3;
Z = 2;
V = 8;
```

What is the output when the following commands are typed in sequence from the MATLAB command window?

(i) V ~= X;	(ii) V == Y;
(iii) X+Y/2;	(iv) V/Z*W;
(v) 4*W/Z^2+2;	(vi) Z*[1:2:6];

Q16. Answer any *TWO* of the following

[a] An experiment is performed m times. The researcher wishes to find the relation between input and outcome. The experimental data is stored in a matrix A of size 70 x 2. The values of input and output are stored in first column and second column of A, respectively. Write MATLAB command for separating input data **X** (vector) and output data **Y** (vector). Input data can be mean adjusted by subtracting each data point with its mean value. Let the mean adjusted input data is stored in **Z**. Write MATLAB instruction to obtain **Z** from **X**. [5]

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Total No. of Pages 2

FIRST SEMESTER

END SEMESTER EXAMINATION

Roll No. ......

EMBA

(Nov-2019)

EMBA 101 MANAGEMENT PROCESS & ORGANISATIONAL BEHAVIOUR

Time: 3 Hours

Max. Marks : 60

Note : Answer any five questions.
All questions carry equal marks.
Assume suitable missing data, if any.

Q1 Explain Herzberg's Two factor theory and differentiate it from Maslow's Theory of need Hierarchy.

Q 2 Answer the following:

a. 'Learning leads to change in human behavior'. Comment

b. When should punishment be used by the managers?

c. 'Behavior is a function of its consequences. Do you agree?Why?

Q3 a. Discuss Freudian stages of development of personality.

b. Suppose your assignment is to lay off three employees in the department you are managing. What perceptual errors should you watch for while delivering your message ?

Q4 Write short notes on :

a. Johari window

b. Life positions

Q5 How might understanding whether an employee has an internal or external locus of control help a manager better communicate with, motivate, and lead the employee?

Q6 As a manager, how would you deal with resistance to change when you suspect employee fears of job loss are well founded?

Q7 You are a busy partner in a legal firm, and an experienced secretary complains of continued headaches, drowsiness, dry throat, and occasional spells of fatigue and flu. She tells you she believes air quality in the building is bad and would like something to be done. How would you respond?

Total No. of Pages:2

Roll No. ......

First Semester

END- SEMESTER EXAMINATION

Nov. -2019

EMBA 102: Financial Accounting

Time: 3:00 Hours

Max. Marks: 60

Note: Attempt all questions. All Questions carry equal marks.

Ques: 1 On 1st April, 2014, X Ltd. Purchased a machinery for Rs, 12,00,000. On 1st Oct,2016, a part of the machinery purchased on 1st April 2014 for Rs 80,000 was sold for Rs 45,000 and a new machinery at a cost of Rs1,58,000 was purchased and installed on the same day. The company has followed WDV method of depreciation @ 10% p.a. Show the necessary ledger accounts if:

(A) Provision for depreciation account is maintained.
(B) Provision for depreciation account in not maintained.

Ques:2 Prepare Double column cash book with cash and bank columns from the following information:

Year :2017			
Sept: 1 Cash in hand Bank Overdraft	Rs 75,000 Rs 35,000	Sept: 15 Goods purchased and paid Cheque* Received Cash Discount	Rs 20,000 Rs 472
Sept:2 Paid Wages	Rs 2,000	Sept:20 Paid Rent*	Rs 5,000
Sept: 5 Cash Sales* Allowed Cash Discount	Rs 70,000 Rs 944	Sept: 25 Drew from bank for Personal uses	Rs 4,000
Sept:10 Cash deposited into Bank	Rs 40,000	Sept: 30 Salary Paid	Rs 10,000

Transactions marked with (*) are subject to levy of CGST & IGST @ 6% each.

Ques 3: (a) Calculate Total Assets to Debt ratio from the following information:

Total Debt:	Rs 48,00,000
Shareholders' Fund:	Rs 8,00,000
Reserves & Surplus:	Rs 2,00,000
Current Assets:	Rs 20,00,000
Working Capital:	Rs 4,00,000

(b) From the following information calculate credit period.

Total sales for the year (Net): Rs 1,75,000
Cash Sales (Net): 20% of total net sales
Sales return-out of credit sales: Rs 10,000
Sundry Debtors:
Opening Balance: Rs 8,000
Closing Balance: Rs 12,000

Ques 4: Define Financial statements. Who are the users of financial statements?

Ques 5: (a) Differentiate between cash book and cash flow statement.

(b) Journalise the following transactions in the books of Kamal:

Ganesh informs Kamal that Sahani's Promissory Note for Rs 75,000 has been dishonoured and that noting charges of Rs 250 have been paid. Kamal sends Ganesh's cheque and withdraws the Promissory Note.

XXXXX

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Total No. of Pages 01

Roll No. ………….

MBA(Executive)

I SEMESTER

END SEMESTER EXAMINATION

Nov- Dec, 2019

PAPER CODE: EMBA-103

TITLE OF PAPER: Marketing Management

Time: 3:00 Hours

Max. Marls: 60

Note: Attempt any Five questions. All questions carry equal marks. Assume suitable missing data, *if any.*

1. Attempt any three of the following:

I. Differentiate between sales and marketing.

II. What contribution does marketing make to the society?

III. What is marketing audit? What precautions a marketer must make while conducting marketing audit?

IV. Explain major ethical concerns in contemporary marketing practices?

2. "The complexity of doing business has grown multi-folds in recent times". In light of the above statement, explain how the marketing environment is affecting the firms operating in telecom and FMCG sector?

3. What is the need for positioning a product/service? Which market segment bases might be most applicable to a commercial radio FM station specializing in dance- music and celebrity news/gossip?

4. How does an effective and sound distribution provide a long term sustainable competitive advantage to a firm? Differentiate between intensive, selective and exclusive distribution strategy. Design suitable distribution channel/s for a low cost laser printer and green tea?

5. The existing size of air purifier market in India is expected to be around 200-250 crores. The market is dominated by three major brands: Blue Star, Eureka Forbs and Kent. In addition to that, around sixty brands are present in unorganized category. All the brands are collectively making huge investments in educating the customers, promotion and focus on bringing the best technology. In light of the above facts:

I) What pricing strategy you would like to use for this product ?

II) Develop a suitable promotional mix for an unorganized player in this category with estimated budget of five lakhs. You are free to make suitable assumptions.

6. Explain the theory of Product Life Cycle (PLC)? In which stage of PLC, would you like to keep: a self driving car, an electric car and a diesel car? Justify your answer in each case.

(c)Draw Isoquants if the two factors of production (Labour and Capital) are:

(i) Perfect substitutes of each other
(ii) Perfect complementary goods of each other

Explain the two cases with special focus on Marginal Rate of Technical Substitution. [6]

Q5. Attempt any TWO questions out of the following:

(a)An amusement park charges different prices for regular admission and a lower price for senior citizens. What is this pricing scheme called? Critically analyse this pricing scheme. What conditions are necessary for the amusement park to practice this pricing strategy? [1+2+3]

(b). Governments around the world often enact laws that restrict the prices that businesses can legally charge their customers. One such example is that of the minimum support prices that are set by the government. What is the welfare effect due to the shortages created in the market as a result of price ceiling? Explain using diagram. [6]

(c)A perfectly competitive firm is incurring losses in the short run. The dilemma the manager is facing is to either shut down the plant or to continue to operate. What factors would affect the manager's decision in such a situation. Explain with the help of diagrams. [6]

END

Total No. of Pages: 4

FIRST SEMESTER **MBA (EXECUTIVE)**
END SEMESTER EXAMINATION *November - 2019*

EMBA-104 MANAGERIAL ECONOMICS

Time: 3:00 Hours *Max. Marks: 60*

Note: Answer **ALL** questions. All questions carry equal Marks. Assume suitable missing data, if any.

Q1. Adapted from articles in newspapers, India Today, Livemint and Economic Times, answer the questions that follow:

Profits of Vodafone Idea and Bharti Airtel have been hit and some rivals have gone out of business since Reliance Industries' Jio Infocomm unleashed a fierce price war when it entered India's crowded telecoms market in 2016 with free calling and cut-price data.

Competition levels in the telecom sector are set to ease significantly next year and the industry blended average revenue per user (ARPU) likely to recover some lost ground with Reliance Jio slated to pursue a less aggressive pricing strategy in calendar 2019, global ratings agency, Fitch said.

Reliance Jio's disruptive pricing since its entry more than two years ago forced the older carriers to match rates to hold on to customers, galvanising consumption of voice and data services. Fringe players that couldn't withstand the brutal price wars exited and the industry consolidated down to three large private players–Vodafone Idea and Bharti Airtel among the older ones and Jio – making it an ideal market situation for pricing power to return over time.

Vodafone idea, Bharti Airtel and Reliance Jio accounts for over 90% of the revenue market share. Yet, the industry is suffering with losses of more than ₹40000crore. Recently, Reliance Jio Infocomm Ltd has raised basic monthly tariff plans to account for interconnect usage charges (IUC) that the telecom operator has to incur for calls made to rival networks.

Analysts said the price rise bodes well for Bharti Airtel and Vodafone Idea which have been complaining that current tariffs are unsustainable and price repair must happen in the sector.

The rival operators have still not increased their tariffs!

Considering the developments as mentioned in the above case, answer the following:

(a) Which market structure is represented by Telecom sector in India? Name one most striking feature of this market structure highlighted in above case. [2]

(b) Which behaviour of Airtel and Vodafone in retaliation to the price hike by Reliance Jio is highlighted in above case? Explain the impact of this behaviour using suitable market structure model. [4]

:) Assuming the three players decide to collude, how can it lead to joint profit maximization? Do you think the situation of collusion will sustain for long? Explain using diagrams. [6]

2 Attempt any TWO questions out of the following:

) Due to the recessionary conditions in the economy and the consequent reduction income of the consumers, the demand for generic foods increases and the demand or organic foods decreases. Show the impact on the consumer's purchase pattern for ne two consoles using indifference curve analysis. Discuss the nature of the two goods. [6]

b) Briefly explain consumer's equilibrium in case of two commodities. Also, explain the Marginal Rate of Technical Substitution. [6]

(c) Calculate cross price elasticity of demand between
(i) Inkpen and ballpen
(ii) Inkpen and ink

Good	Before		After	
	Price (Rs/Unit)	Quantity (unit/month)	Price (Rs/Unit)	Quantity (unit/month)
Inkpen (Y)	5	15	2	20
Ballpen (X)	1	10	1	8
Inkpen (Z)	4	10	5	9
Ink (X)	5	15	5	10

Comment on the nature of goods. [6]

Q3. Attempt any TWO questions out of the following:

(a)How do mutual funds help in reaping the benefit of economies of scale and economies of scope? [6]

(b) Show total cost curves and average cost curves in two diagrams respectively and explain the relationship between cost curves. [6]

(c) In 50 words differentiate between Economies of Scale (EOS) and Increasing Returns to Scale? Explain in detail the factors that result in EOS. [6]

Q4. Attempt any TWO questions out of the following:

(a)Explain law of diminishing marginal returns with the help of a suitable example and diagram. Why a producer chooses second stage of production? [6]

(b) Assuming Price of output (Q) as $3 and Cost of Labour as $400, how will the producer choose the optimal inputs (Labour, L and Capital, K) to maximize its profits. [6]

K*	L	Δ L	Q	MP_L	AP_L
2	0	--	0	--	--
2	1	1	76	76	76
2	2	1	248	172	124
2	3	1	492	244	164
2	4	1	784	292	196
2	5	1	1100	316	220
2	6	1	1416	316	236
2	7	1	1708	292	244
2	8	1	1952	244	244
2	9	1	2124	172	236
2	10	1	2200	76	220
2	11	1	2156	-44	196

Starbucks executives developed employee hiring and training programs that were the best in the restaurant industry. Today, all Starbucks employees are required to attend training classes that teach them not only how to make a good cup of coffee, but also the service oriented values of the company. Beyond this, Starbucks provided progressive compensation policies that gave even part-time employees stock option grants and medical benefits – a very innovative approach in an industry where most employees are part time, earn minimum wage and have no benefits.

Unlike many restaurant chains, which expanded very rapidly through franchising arrangement once they have established a basic formula that appears to work, Schultz believed that Starbucks needed to own its stores. Although it has experimented with franchising arrangements in some countries, and some situations in the United States such as at airports, the company still prefers to own its own stores whenever possible.

As the company grew, it started to develop a very sophisticated location strategy. Detailed demographic analysis was used to identify the best locations for Starbuck's stores. The company expanded rapidly to capture as many premium locations as possible before imitators. Astounding many observers, Starbucks would even sometimes locate stores on opposite corners of the same busy street – so that it could capture traffic going different directions down the street.

By 1995 with almost 700 stores across the United States, Starbucks began exploring foreign opportunities. First stop was Japan, where Starbucks proved that the basic value proposition could be applied to a different cultural setting (there are now 600 stores in Japan). Next, Starbucks embarked upon a rapid development strategy in Asia and Europe. In late 2006, with 12,000 stores in operation, the company announced that its long term goal was to have 40,000 stores worldwide. Looking forward, it expects 50% of all new store openings to be outside of the United.

a) What business level strategies and global strategies at Starbucks' help the company to achieve superior financial performance? (5)

b) Identify the resources, capabilities and distinctive competencies of Starbucks? How do Starbucks' resources, capabilities and distinctive competencies translate into superior financial performance? (3)

c) How secure is Starbucks' competitive advantage? What are the barriers to imitation here? (4)

END

Total no. of pages-4

Roll No. ______

SEMESTER III

E.M.B.A.

END SEMESTER EXAMINATION

Nov/Dec-2019

EMBA 301 - STRATEGIC MANAGEMENT

Time: 3 hours

Max Marks: 60

Instructions: Answer all questions by selecting any two parts from each question (Q.No. 1-4). Question No. 5 is compulsory. All questions carry equal marks.

1(a) Identify and explain the business model being adopted by the following companies:

i. Walt Disney
ii. Quikr
iii. Reliance Telecom (6)

1(b) Assume you are in FMCG industry in India. On the basis of CAGE framework, rank the following countries in which you should expand out of Malaysia, Australia, Bazil, and China. Explain with suitable reasons. (6)

1(c) Stihl is the world's leading manufacturer and marketer of chain saws with annual sales exceeding $2 billion. With innovations, the company holds over 1,000 patents related to chain saws and outdoor power tools. The company's products are sold at price points well above competing brands and are sold only by its network of 8,000 independent dealers. How would you characterize Stihl's competitive strategy? Explain your answer by giving advantages and disadvantages of this strategy. (6)

2(a) Identify with reasons, the type of corporate level strategy followed in the following cases:

i. Heidelberg Cement announced that its US subsidiary has entered into an agreement with a US subsidiary of Cemex to buy Cemex's northwest materials business consisting of aggregate, asphalt and ready mix concrete operations in Washington.
ii. A pioneer computer firm after achieving incredible growth has decided to take a breathing spell.
iii. An old company had been facing financial issues for many years and is willing to give up its independence in exchange for security. (6)

2(b) "Structure follows strategy" or "strategy follows structure". Which one of these is true. Validate your point. (6)

2(c) Comment on the following:

i. *"It is possible for a company to be the lowest cost producer in its industry and simultaneously have an output that is valued by customers."*

ii. *"Turnaround is all about converting a negative situation into a positive situation."* (6)

3(a) Identify and explain the international entry modes to be adopted in the following cases:

i. American Locomotive company sold locomotives and diesel engines in Australia and got paid in cash, which according to the agreement with Australia, they were spent for purchase of Australian cutting tools from the same company.

ii. McDonnell Douglas agreed to a deal with Thailand for eight top of the range F/A – 18 strike aircraft. Thailand agreed to pay $578 million of the total cost in cash, and McDonnell Douglas agreed to accept $93 million in a mixed bag of goods including Thai rubber, ceramics, furniture, frozen chicken and canned fruit.

iii. A private developer undertakes all activities necessary to produce a project, including land purchase, permits, plans and construction, and sells the ready project to the housing authority. (6)

3(b) "Harley Davidson, GM, Walt Disney, and Digital Equipment Corporation (DEC), among many others, which all at one time were held up an examples of managerial excellence, have gone through periods where their financial performance was poor and they clearly lacked any competitive advantage." In the light of the above statement, explain why does a company lose its competitive advantage and fail? How can a company avoid failure and build a sustainable competitive advantage? (6)

3(c) "A brilliant strategy can put a firm on the competitive map, but only solid execution can keep it there." Comment. (6)

4(a) Why was it profitable for GM and Ford to integrate backward into component-parts manufacturing in the past, and why are both companies now buying more of their parts from outside suppliers? What are the other ways through which a company can overcome limitations associated with vertical integration? (6)

4(b) Explain the type of offensive tactic highlighted in the following situations:

i. HUL introduces Knorr instant noodles to compete with Nestle Maggi.

ii. Toshiba used superior technology to upgrade picture quality standards to launch a new range of televisions which used flat square tube technology.

iii. Mercedes-Benz attacked General Motors by targeting the prestige market. They purposely priced their luxury cars much higher as part of their campaign to represent Mercedes as a superior car. (6)

4(c)(i) "Steel mini-mill operator Nucor is considered as most cost efficient steelmaker in U.S. Its distinctive competency in low cost steel making does not come from any specific resources. What distinguishes Nucor is its unique capability to manage its resources in a highly productive manner." In the light of the above statement, explain in what all ways a company can achieve distinctive competencies. (3)

4(c)(ii) Explain the environmental analysis technique which is used to evaluate company's position vis-à-vis its direct competitors. (3)

5. Recently, Starbucks', the ubiquitous coffee retailer, closed a decade of astounding financial performance. Sales had increased from $697 million to $7.8 billion and net profits from $36 million to $540 million. In 2012, Starbucks' was earning a return on invested capital of 25.5%, which was impressive by any measure, and the company was forecasted to continue growing earnings and maintain high profits through to the end of the decade. How did this come about?

Thirty years ago Starbucks was a single store in Seattle's Pike Place Market selling premium roasted coffee. Today it is a global roaster and retailer of coffee with more than 12,000 retail stores, some 3,000 of which are to be found in 40 countries outside the United States. Starbucks Corporation set out on its current course in the 1980s when the company's director of marketing, Howard Schultz, came back from a trip to Italy enchanted with the Italian coffeehouse experience. Schultz, who later became CEO, persuaded the company's owners to experiment with the coffeehouse format—and the Starbucks experience was born.

Schultz's basic insight was that people lacked a "third place" between home and work where they could have their own personal time out, meet with friends, relax, and have a sense of gathering. The business model that evolved out of this was to sell the company's own premium roasted coffee, along with freshly brewed espresso-style coffee beverages, a variety of pastries, coffee accessories, teas, and other products, in a coffeehouse setting. The company devoted, and continues to devote, considerable attention to the design of its stores, so as to create a relaxed, informal and comfortable atmosphere. Underlying this approach was a belief that Starbucks was selling far more than coffee – it was selling an experience.

From the outset, Schultz also focused on providing superior customer service in stores. Reasoning that motivated employees provide the best customer service,

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Roll No. ......

Third Semester

EMBA

END- SEMESTER EXAMINATION

Nov. -2019

EMBA-302 International Business Management

Time: 3:00 Hours

Max. Marks: 60

Note: Please keep your answers brief and to the point. Attempt any 5 questions from below.

Q1: Explain any 8 of the following in very brief: (1.5 X 8 = 12)

1. International Fisher Effect
2. Three attributes that are forecasted in case of exchange rate prediction
3. Dollarization
4. Crawling Peg
5. Managed Floats
6. Bips
7. Reporting Dealers
8. Optimum Tariff
9. Gini Coefficient
10. Indent Firms

Q 2(a) : Explain the difference between the following w.r.t Foreign Exchange Markets

1. OTC market and exchange trade market
2. Fundamental forecasting and technical forecasting of exchange rates
3. Spread and Margin

Q 2 (b) List various factors that affect exchange rates. Provide explanation of each factor.

Q 3 (a) : Explain in detail various instruments of trade control with suitable examples

Q 3 (b): Explain the impact of FDI on both host country and home country with suitable examples

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Q 4(a): Explain how behavioral practices affect international business?

Q 4 (b) : List the ways to deal with cultural differences from both sensitivity and adjustment perspective as well as from strategic perspectives.

Q 5 (a) : Please explain how exchange rate movement affects business decisions

Q 5 (b) List down how exchange rate movement impacts a country at macro-economic level

Q6 (a) Please explain in brief roles and functions of World Trade Organization (WTO) and International Monetary Fund (IMF)

Q6 (b) What are trade blocs? What are motivations behind regional economic formations? Name any three and briefly explain about their objectives

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Total No. of Pages: 02

Roll No.____________

Delhi Technological University
Delhi School of Management
3rd Semester MBA (Executive)
End Semester Examination Dec-2019
Information Technology Management (EMBA-303)

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Time: 3 Hours

Maximum Marks: 60

Note : Answer any 6 questions. All questions carry equal marks.
Assume suitable missing data, if any.

Marks

Read the following narration to answer questions 1, 2 and 3:
Dinesh Tukaram Unnati relaunched the company viz. DTU-Retail and expanded his family business in all major cities of India. In beginning of 2019, company has more than 100 stores spread across India. DTU-Retail aims to expand its operations to 500 stores in year 2020 and to improve its profitability. Company is yet to gain full benefit of its heavy investment in Information Technology. You are appointed as an IT advisor to guide the company on technology refresh initiatives to achieve its strategic goal. You have observed cumbersome business processes and more than 20 Information Systems that were developed in ad-hoc manner over the time are in operation. Collation of data from these system for meaningful analytics is difficult due to absence of integration points and data quality. Due to varied technologies of these systems, IT Department has engaged several vendors and have employed number of employees including contractual resources, who are proficient in respective technologies. IT Department yet to address perennial problems of frequent system breakdown, due to hardware and network failure, that often results into data losses and online customers. To set house in order, on priority, you have decided to: address data quality issues to have meaningful data for analytics; weed out liability processes; and to rationalize information system.

Q1 Discuss how Principles of Business continuity and DR Operation can help in avoiding frequent system breakdowns and loss of data to great extent. (10)

Q2 Explain how would you use following methods for control and continuous improvement of processes:
- [a] DMAIC (5)
- [b] PDCA (5)

Q3
- [a] Discuss why would you or not consider ERP solution for DTU-Retail? (5)
- [b] Discuss benefits of CRM system (5)

Q4
- [a] Describe dimension of Data Quality (5)
- [b] What measures would you take to deal with data quality errors (5)

Q5 Describe the following with an example and metric (how to measure) each:
- [a] Service Quality (5)
- [b] Process Quality (5)

Q6 Describe the following with an example each in any business ecosystem:
- [a] Keystone Firms (5)
- [b] Niche Firms (5)

Q7 Describe the usage of following technology:
- [a] Artificial Intelligence (5)
- [b] Robotics Process Automation (5)

Total No. of Pages: 02

Roll No.:

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Delhi Technological University
Delhi School of Management
3rd Semester MBA (Executive)
End Semester Examination Dec-2019
Information Technology Management (EMBA-303)

Time: 3 Hours

Maximum Marks: 60

Note : Answer any 6 questions. All questions carry equal marks.
Assume suitable missing data, if any.

Q8 Discuss role of Information Technology in addressing global complexities of Supply Chain Management (10)

Q9 Explain the following terms:

[a] MUSICAL (5)

[b] Virtual Company (5)

4th SEMESTER

END SEMESTER EXAMINATION *November-2019*

PAPER CODE: ESCM-04

TITLE OF PAPER: Service Operations management

Time: 3:00 Hours *Max. Marks: 60*

Note: Answer any five questions.
All questions carry equal marks. (6+6 = 12)

Q.1 [a] Identify the key differences between a service offering and a physical product offering.

[b] Enumerate the reasons for the growth and the current status of the service sector.

Q.2 [a] What are Psychographic and Demographic bases of Segmentation for the Service industry?

[b] Discuss Mass marketing and Niche marketing for an organisation in the transportation services?

Q.3 [a] What are the non-monetary aspects of Service Pricing?

[b] What is 'Service Recovery Paradox'? How would you design an effective Service Recovery System?

Q.4 [a] Discuss the value added by Intermediaries to the Service business.

[b] What is the role of employees in "delivering the promise" with reference to the Services marketing Triangle?

Q.5 [a] Discuss strategies for shifting Demand to match Capacity in a service industry

[b] What is the role of "Physical Evidence" in the expanded Marketing Mix for Service organisations?

Q.6 [a] Formulate the marketing strategy for an organisation giving Healthcare service.

[b] Assess the usefulness of the SERVQUAL technique for measuring quality in the hospitality industry.

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Total no. of pages_One
3rd SEMESTER

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Roll No..........
MBA (Executive)

END Examination

Nov-Dec 2019

ESCM-06 Business Process Re-engineering

Time: 3 Hours

Max. Marks: 60

Attempt any five questions. All questions carry equal (12) Marks. Assume suitable missing data, if any.

Question 1. Explain the various stages of Individual level of change. How Dissatisfaction with the status quo impacts the situation?

Question 2. ITC echoupal was a game changer in Business Process Reengineering. Explain how ITC handled the challenges in implementing the BPR initiative in a rural environment.

Question 3. Explain the various categories of Change Levers. Also highlight the credibility of the change agent and the usage of a change lever.

Question 4. Radical improvement is more powerful than incremental improvement. Evaluate the statement.

Question 5. With the help of Indian success stories highlight the role of Information Technology in Business Process Reengineering.

Question 6. Discuss the Value Stream Mapping in detail with the help of an example.

Question 7. Write short notes on (any Two):

a) SIPOC

b) Gap Analysis

c) Fence Sitters

Total No. of Pages 03 Roll No. ......

THIRD SEMESTER **MBA [illegible]**

END SEMESTER EXAMINATION NOV/Dec -2019

EKTM-01 Internet Business Models and Business Strategies

Time: 3:00 Hours *Max. Marks : 60*

Note: Answer **ALL** questions. All questions carry equal marks.
Assume suitable missing data, if any.

Q.1[a] Attempt any TWO of the following [3+3]

i. Differentiate between e-business and e-commerce.

ii. Identity any three evolving technologies impacting Digital Marketing environment.

iii. What do you understand by pure electronic commerce? Explain using suitable example.

[b]User Experience (UX) is the new enabler of Customer Satisfaction. By investing in delivering an exceptional User Experience, brands are securing higher recurring usage, stronger engagement, higher App ratings, and better conversions. Examine the statement while identifying the characteristics of online consumers. [6]

Q.2[a] Attempt any TWO of the following [3+3]

i. Explain the different types of e-commerce organizations with example.

ii. "New internet and social business models enable user content creation and distribution, and support social networks." Facilitating social interactions is one of the unique features of internet business models today. Identify the other unique features of internet business models.

iii. What do you understand by collaborative commerce?

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[b] Three most distinct concepts which define a marketplace transaction include content, context and infrastructure. Choose any company and assess its marketplace. [6]

Q.3[a] Attempt any TWO of the following [3+3]

i. Identity the components of a typical website. Examine each component.

ii. Design audience persona profile for a company providing office spaces on demand.

iii. Define usability in context of website. Explain any one the methods of usability.

[b] "In electronic commerce, businesses require to integrate two kinds of activities - ones that are embedded into the physical value chains and the others that are built through information into the virtual chain. Although the relative importance of these two kinds of chain depends on the characteristics of the products and services, their integration, nevertheless, plays a critical role in the success of e-commerce". Evaluate the statement by citing relevant examples. [6]

Q.4[a] Attempt any TWO of the following [3+3]

i. Owned Media is any media asset a company owns such as Websites. Identify the Analytics tools and social metrics for Owned Media

ii. Explain digital revenue generation models.

iii. Identify the characteristics of digital revolution.

[b] "In recent times creative industries management seems to have been reshaped by the influence of information and communication

technology. Constant experimentation with business models and innovation in this area has become one of the key sources of firms' competitive advantage. As a result, traditional business models, which were dominant and stable in their respective industries, have given rise to multiple disruptive business models". Elaborate [6]

Q.5[a] Attempt any TWO of the following [3+3]

i. Explain the concept of value proposition.

ii. Identify the components of business model.

iii. "You can never go wrong by investing in communities and the human beings within them". Examine the role of social media and blogs in light of this statement.

[b] Choose any company and evaluate using Porter's value chain [6]

Total Number of Pages 03

Roll no……………….

Third SEMESTER

MBA (Executive)

END SEMESTER EXAMINATION

Nov/Dec 2019

EKTM-08 E-Business and E-Commerce

Note: a) Question number 1 and Question number 2 are Compulsory. b) Choose any 3 questions to answers from remaining 4 questions c) Assume suitable missing data, if any

Max Marks: 60

Time: 3:00 Hours

Q.1 Multiple Choice Questions, Choose the correct option. (1X10)

1) E-commerce is often seen as simply buying and selling using the internet but do the following perspectives also apply to e-commerce?

A. A business process perspective
B. An online perspective
C. A communications perspective
D. A service perspective
E. All of the above

2) When you look at e-commerce and e-business, which is the most realistic relationship between these two concepts?

A. E-commerce is a subset of E-business
B. E-commerce has some overlap with E-business
C. E-commerce is broadly equivalent to E-business
D. E-business is a subset of E-commerce
E. None of the above

3) E-government is becoming more accepted as an important feature within government in many countries. What does it provide?

A. All of the above
B. Facilities for dissemination of information and online services at local and national levels
C. The facility to securely communicate between governments and government departments
D. The ability to gather taxes more efficiently

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4) An example of a communications benefit from creating an e-commerce website is:
A. Lower paper costs needed for marketing and fewer staff needed in contact center
B. The ability to reach overseas markets without a sales presence
C. Slower response to customer enquiries
D. Tracking of number of customers using different parts of site
E. None of the above is correct

5) Click and mortar business are?
A. Businesses that have only physical presence
B. Businesses that have both an online and an offline presence
C. Businesses that have neither online nor offline presence
D. None of above

6) Which one of these is not a part of organizational strategy?
A. Strategy Formulation
B. Strategy Implementation
C. Strategy Assessment
D. Strategy Insurance

7) Which one is not a component of Operational CRM
A. Sales Force Automation (SFA)
B. Enterprise marketing automation (EMA)
C. Customer service and support (CSS)
D. Business Administration Processing (BAP)

8) Which process is responsible for discussing reports with customers showing whether services have met their targets?
A. Continual Service Improvement
B. Business Relationship Management
C. Service Level Management
D. Availability Management

9) _______ is malicious software that criminals distribute to infect a large number of hijacked Internet connected computers controlled by hackers.
A. Page Hijacking

B. Denial of Service (DoS)
C. Botnet
D. Trojan Horse

10) Which one of these is not a part of Territory Assignment?
A. Industry Based
B. Named Accounts
C. Department Based
D. Geography Based

Q.2 What is a Payment Gateway and how is it different from a Payment Processor? Explain briefly the different types of Payment Gateways with Example and list down the limitations of payment gateways. (20)

Q3. What is the Porter's Five Forces Model and Strategies? How is organization strategy relevant for E-business and E-commerce? Please list down the stages of strategy. (10)

Q4. What is a CRM software and how is it beneficial to an E-commerce organization? Describe briefly the purpose of territory management within B2B company. (10)

Q5. You are an entrepreneur and starting a B2B company. What are the key laws and regulations to be considered while operating an E-commerce business? Please list any 3 and briefly explain them. (10)

Q6. Write short notes on any of the 2: (10)
a) Any 2 technical malware attack methods
b) Cyber Warfare
c) 3 benefits each to Consumers, Society and Organization

Total No. of Pages 2 Roll No. ......

THIRD SEMESTER EMBA [Odd]

END SEMESTER EXAMINATION November-2018

EKTM-11Data Analytics-1

Time: 3:00Hours Max. Marks:60

Note:AnswerALLquestions. All questions carry equal marks. Assume suitable missing data, if any.

Q.1 Please explain by using relevant examples from your experience, how business analytics is more helpful in making business decisions as compared to a gut-based decision in the contemporary business. [12]

Q.2 A grocery retailer has to segment its 1.3 million loyalty card customers into 5 different groups based on their buying behavior, income status, age, and gender. It will then adopt customized marketing strategies for each of these segments in order to target them more effectively.

Please assume relevant data wherever necessary and explain in 4 steps the overall approach starting from the hypothesis statement and business analytics technique you will use.

[12]

Q.3 We have the data from point of sales systems recorded in quantity sales day-by-day and some more variables like purchase accounts, repeat purchase customers, age and gender. The store manager wants to know the peak in sales beforehand so that he can plan for the appropriate support staff and optimum stock to cater to those peak days.

Please assume relevant data wherever necessary and explain in 4 steps the overall approach starting from the hypothesis statement and business analytics technique you will use.

[12]

Q.4An e-commerce company that mails expensive promotional offers to customers would like to know whether a particular customer is likely to respond to the offers or not. For example, they'll want to know whether that consumer will be a "responder" or a "non-responder." In marketing, this is called propensity to response modeling.

Please assume relevant data wherever necessary and explain in 4 steps the overall approach starting from the hypothesis statement and business analytics technique you will use.

[12]

Q.5Using an example of your own, please explain in 4 steps how you can use a Decision Tree in strategic decision making.

[12]