QUESTIONS PAPERS
SUPPLEMENTARY EXAMINATION
FEBRUARY- 2019

MBA(FT/PT)/EMBA
MB/BBA and BA (H) ECONOMICS
1st & 3rd SEMESTER

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QUESTION PAPERS FOR MBA (DSM&USME) & EMBA SUPPLMENTRY EXAMINATION --February-2019 (Semester – I & III)

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(EAST DELHI CAMPUS)

QUESTION PAPERS FOR BBA/BA (H) ECONOMICS SUPPLEMENTARY EXAMINATION FEBRUARY- 2019

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FIRST SEMESTER **MBA/PhD**

SUPPLEMENTARY EXAMINATION ***Feb-2019***

PAPER CODE MGT-11

TITLE OF PAPER Management Process & Organization Behavior

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

Note : All questions are compulsory. All sub-parts carry equal marks. Assume any missing data, if any.

Q.1 Sourav Ganguly will forever rank as one of Indian cricket's best leaders. Even more a leader of men than just a player, he is rightly credited for having changed the mindset of the Indian cricket team at the turn of the century. Ganguly injected positivity and taught the art of competing and even winning, his single-biggest contribution to Indian cricket. At the root of this transformation was his mindset. Not to give up in the face of adversity, he took calls that may have evoked the critics' ire at the time, but benefitted Indian cricket in the long term.

Ganguly's success mantra, which is what his book A Century is not Enough is mostly about, is tried and tested, all-pervasive and definitely the book's core strength.

A recluse by nature, Ganguly consciously changed his persona on the cricket field to suit Indian cricket. It was, like he says, essential to deal with the mighty Australians, who had come to India having won 15 Test matches on the trot and made it 16 with a three-and-a-half-day mauling of India at the Wankhede stadium in the first of a three-Test series in 2001. "I always thought we were a collection of quality individuals but in high pressure moments we fell apart. I wanted to build a new team culture quickly...I was inspired by the way the Aussies played their cricket. I wanted to inculcate the same spirit in my team. I was very clear in my mind that I would only play to win. And while attempting to win if I lost I didn't mind. I wanted to create a culture of winning and absolutely detested draws."

From making Steve Waugh wait at the toss to allowing his men to have a go at the Australians, Ganguly was consciously trying to usher in a new era in Indian cricket. In doing so, he was successful in getting under the skin of Waugh's men, something no Indian captain had done or even thought of doing before. With supremely talented youngsters like Virender Sehwag, Harbhajan Singh, Zaheer Khan and Yuvraj Singh in his team, his task had become easier. Seeing a captain who was aggressive and unafraid to give it back, each of these men had started to express themselves on the field. It was a new Indian team and Ganguly was at the centre of it. "Off the field I was docile, introverted, a little withdrawn. Now I became aggressive on the field. I learned this tactic in the famous Eden Gardens Test in 2001. It was a tense game and I noticed that quite a few of our players were reacting aggressively to the pressure tactics of the Australians. They were giving it back. This was not planned. It happened spontaneously"[1]

[a] Explain the leadership style of Ganguly ? Are there any limitation to his approach ?

[b] Bring out the difference between a manager and a leader based on case understanding ? Who plays a more active role in driving the business transformation ?

P. T. O.

Q.2 In a democracy, non-governmental organizations provide a platform to civil society to dissent in an informed and reasoned manner[i].

[a] Elaborate on the statement based on understanding of conflict ?

Q.3 The actual results of mergers and acquisitions don't always live up to expectations. M&A growth strategies promise a multitude of strategic opportunities; from rapid growth, to eliminating competition, to access to new markets. And many organizations are currently, or have, embarked on merger and acquisition growth strategies to varying effect.

When asked about the primary causes of these mixed results, most leaders cite a misalignment between the two organizations' cultures. This friction can wreak havoc as the members of different groups assimilate to drive the performance gains that M&A strategies forecast.i.

[a] Elaborate on criticality of cultural synergy in an M&A process.
[b] What are some managerial challenges in an M&A process..

Q.4 [a] What limitations of classical theories were addressed by later researchers ?
[b] You have identified a prospective business opportunity in food space for diet conscious population. Detail out the process from ideation to launch.
[c] Detail out decision making process while purchasing a laptop.

Q.5 [a] Operations excellence can be a competitive advantage for organizations. Elaborate.
[b] Managerial ethics has become a critical component of management process in contemporary times. Comment.

i. Cases adapted from News reports for class purpose.

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FIRST SEMESTER

MBA

SUPPLMENTARY EXAMINATION

(FEB- 2019)

MGT-12 FINANCIAL AND COST ACCOUNTING

Time: 3 Hours

Max. Marks: 60

Note: Answer all five questions

Q1. What is the meaning and the objectives of cost accounting? How cost accounting differs from financial accounting ? What are the major classification of cost ?

Q2. (a) State four components of cost sheet.

(b) Prepare the cost sheet from the following items :

Raw material purchased	25,000
Wages paid	10,000
Fuel expenses	3,000
Packing charges	1,000
Salaries of office staff	4,000
Commission on Sales	2,000
Printing and Stationary	1,500
Opening stock of raw material	5,000
Closing stock of raw material	2,000

Q3. M/s Sahani Enterprises acquired a printing machine for Rs. 40,000 on July 01, 2016 and spent Rs. 5,000 on its transport and installation. Another machine for Rs. 35,000 was purchased on January 01, 2018. Depreciation is charged at the rate of 20% on written down value. Prepare Printing Machine account.

Q4. (a.) A trader carries an average inventory of Rs. 40,000. His inventory turnover ratio is 8 times. If he sells goods at a profit of 20% on Revenue from operations, find out the gross profit.

(b.) Following information is given by a company from its books of accounts as on March 31, 2018:

Particulars	**Rs.**
Inventory	1,00,000
Total Current Assets	1,60,000

P T O

Shareholders' funds	4,00,000
13% Debentures	3,00,000
Current liabilities	1,00,000
Net Profit Before Tax	3,51,000
Cost of revenue from operations	5,00,000

Calculate:

i) Current Ratio
ii) Liquid Ratio
iii) Debt Equity Ratio
iv) Interest Coverage Ratio
v) Inventory Turnover Ratio

Q5. Enter the following transactions in the Sales and Sales Return book of M/s Vineet Stores:

Dec.01	Sold goods on credit to M/s Rohit Stores as per invoice no.325 :
	30 Kids Books @ Rs. 60 each.
	20 Animal Books @ Rs. 50 each
Dec. 10	Sold Goods on credit to M/s Mega Stationers as per invoice no.329 :
	50 Writing Pads @ Rs. 20 each.
	50 Colour Books @ Rs. 30 each
	20 Ink Pads @ 16 each
Dec. 15	Goods Returned from M/s Rohit Stores as per credit note no.201:
	2 Kids Books @ Rs. 60 each
	1 Animal Book @ Rs. 50 each
Dec. 19	Sold goods on credit to M/s Abha Traders as per invoice no.355 :
	100 Cards Books @ Rs. 10 each.
	50 Note Books @ Rs. 35 each
	Less 5% trade discount.
Dec. 22	Goods returned from M/s Mega Stationers as per credit note no.204:
	2 Colour Books @ Rs. 30 each
Dec. 26	Sold goods on credit to M/s Bharti Stores as per invoice no.325 :
	100 Greeting Cards @ Rs. 20 each.
	100 Fancy Envelopes @ Rs. 5 each

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FIRST SEMESTER **MBA**

SUPPLEMENTARY EXAMINATION ***FEB - 2019***

MGT-14 MANAGERIAL ECONOMICS

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

Note: Q6 is compulsory. Attempt any FOUR questions from Q1-5. All questions carry equal Marks. Assume suitable missing data, if any.

Q1. (a) To what extent do you think that price is the most important determinant of demand? Discuss the ways in which the concept of elasticity of demand might be of value to the managing director of an international supermarket chain. **[6 marks]**

(b) 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 marks]**

Q2. 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 marks]**

P.T.O

(b) What do you mean by consumer surplus? Explain with the help of a diagram. **[6 marks]**

Q3. (a) What is the difference between returns to factor and returns to scale? Explain and show different types of returns to scale with the help of isoquants. **[6 marks]**

(b) Labour and capital are substitutes as well as complementary to each other. Draw the production function for labour and capital as perfect complements and explain. What is this production function called? **[6 marks]**

Q4. What is meant by deadweight loss? How does price ceiling result in deadweight loss? How does elasticity of demand affect deadweight loss? Explain in detail. **[8 marks]**

(b) A sales tax of Re. 1 per unit of output is levied on a firm whose output sells for Rs. 5 in a competitive industry.

(i) How does this tax affect the cost curves of the firm?

(ii) What will happen to price, output, and profit? **[4 marks]**

Q5. (a) Citing an example of an oligopoly market structure explain the basic features of such a market structure. Why determination of equilibrium in such a market structure is difficult? **[8 marks]**

(b) When can a monopolist practice price discrimination? **[4 marks]**

Q6. Attempt all of the following:

(a) What is stated by the law of diminishing marginal utility?

(b) Distinguish between a substitute and a complement using diagram.

(c) Distinguish between a normal, an inferior good and a luxury good using IC analysis.

(d) What do you mean by shut down point? Explain with the help of cost and revenue curves. **[3*4=12 marks]**

-END-

on machine II and 3 hours on machine III, while each unit of product C requires 2 hours on each of the three machines. The contribution margin of the three product is Rs. 30, Rs. 40 and Rs. 35 per unit respectively. The machine hours available on the three machines are 90, 54, and 93 respectively.

i. Formulate the above as a linear programming problem (LPP) and solve for maximum profit, using simplex method. **7 Marks**

ii. What is the shadow price for Machine A? Interpret. **3 Marks**

iii. Write the dual to the LPP. **2 Marks**

Q6. Write short notes on any two: **6X2 =12 Marks**

a) Type I and Type II errors in Hypothesis Testing
b) Steps of Hypothesis Testing
c) Explain various types of averages
d) Differentiate between Symmetrical and Asymmetrical Distribution

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FIRST SEMESTER

MBA

SUPPLEMENTARY EXAMINATION *FEB 2019*

MGT-15 DECISION SCIENCES

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

Note: Attempt FIVE questions in all. Q1 is compulsory. Show all calculations clearly. Assume suitable missing data, if any.

Q1. You are required to write True/False, choose correct option(s) or solve or fill in the blanks. Each of parts i to viii is of 1 mark. Parts ix and x are of 2 marks each. **12 Marks**

i. The mean and variance of a Poisson probability distribution function are same. (True/False)

ii. If P(A) = 0.2, P(B) = 0.8, P(A | B) = 0.6, find P(A U B).

iii. The total area under the curve for Normal distribution is equal to ——.

iv. A random variable which follows t distribution can take values in the range ——

v. If X is normally distributed with mean 20 and standard deviation 4 then the value of P(X < 20) = -----

vi. A major constraint in the use of assignment problem is that number of jobs must equal number of machines. (True/False)

vii. If a distribution is abnormally tall and peaked, then is can be said that the distribution is:
   a. Leptokurtic
   b. Kurtosis
   c. Platykurtic
   d. Mesokurtic

viii. The mean of a distribution is 14 and the standard deviation is 5. What is the value of the coefficient of variation?
   a. 60.4%
   b. 48.3%
   c. 35.7%
   d. 27.8%

ix. The probability that a builder will win a contract from company A is 0.40, and the probability that it will win a contract from company B is 0.30. The builder has 0.10 chance of winning the contracts from both companies A and B. What is the probability that the builder will win at least one of these two prospective contracts?

x. *The mean wage of 100 labourers working in a factory is Rs.38. The factory runs two shifts with 60 workers in morning shift and 40 workers in evening shift. The mean wage of 60 labourers working in the morning shift is Rs. 40. Find the mean wage of 40 labourers working in evening shift.*

Q2. [i] The observed data based on a 'Hotel Guest Satisfaction Survey' is as follows:

Choose Hotel Again?	HOTEL		
	A	B	Total
Yes	163	154	317
No	64	108	172
Total	227	262	489

Test the hypothesis that population proportion of guests who would return to Hotel A equals the population proportion of guests who would return to Hotel B. (**Given:** Critical value of Chi-Square Distribution at 5% level of significance with 1, 2 and 4 degrees of freedom are respectively 3.841, 5.991 and 9.488)

6 Marks

[ii] An MBA student randomly sampled four recent graduates in each of Finance, Marketing and HR Management and asked each of them to report the number of job offers. Can we conclude at 5% significance level that there are differences in the number of job offers between the three MBA majors? Formulate null and alternate hypothesis suitably before performing the analysis. Assume conditions of normality of populations with similar variance.

Finance: 3, 1, 4, 1

Marketing: 1, 5, 3, 4

HR Management: 8, 5, 4, 6

[Given: Tabulated F (.05, 2,9) = 4.26; Tabulated F (.05, 3,15) = 3.29] **6 Marks**

Q3. *[i] Suppose that 100 tires made by a certain manufacturer lasted on the average 21,819 miles. Suppose population standard Deviation is 1295 miles, test the null hypothesis $\mu = 22{,}000$ miles against the alternative hypothesis $\mu < 22{,}000$ miles at the .05 level of significance.*

[Given: Tabulated Z (.05) = -1.645; Tabulated Z (.025) = -1.96] **5 Marks**

[ii]Obtain the regression equation from the following data to estimate the blood pressure when age of the person is 50 years.

Age (years)	56	42	72	39	63	47	52	49	40	42	68	60
Blood pressure	127	112	140	118	129	116	130	125	115	120	135	133

Interpret the value of regression coefficient. Also find coefficient of correlation and interpret.

[4 +1+2=7 Marks]

Q4. (i) A company plans to assign five salesmen to five districts in which it operates. Estimates of sales revenue in thousands of rupees for each salesman in different districts are given in the following table. What should be the placement of the salesmen if the objective is to maximize the sales revenue?

Salesman ↓	Revenue (thousand rupees) Districts				
	I	II	III	IV	V
A	40	46	48	36	48
B	48	32	36	29	44
C	49	35	41	38	45
D	30	46	49	44	44
E	37	41	48	43	47

6 Marks

(ii)A firm has manufacturing plants at places A, B, C with daily output of 500, 300 and 200 units respectively. It has warehouses at places P, Q, R, S with daily requirements of 180, 150, 350 and 320 units respectively. Per unit shipping charges on different routes are given below. The firm wants to send the output from various plants to warehouses involving minimum transportation cost. How should it route the product. Solve the transportation problem by using Vogel's Approximation Method.

6 Marks

	To →	P	Q	R	S
From	A	12	10	12	13
	B	7	11	8	14
	C	6	16	11	7

Q5. A firm uses three machines in the manufacturing of three products. Each unit of product A requires 3 hours on machine I, 2 hours on machine II and one hour on machine III. Each unit of product B requires 4 hours on machine I, one hour

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FIRST SEMESTER MBA

Supplementary Examination *Feb 2019*

MGT 16 **Legal Aspects of Management**

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

Note : Answer FIVE questions. Question number 1 is compulsory. Attempt any four from the rest. All questions carry equal marks (12 marks each). Assume suitable missing data, if any.

Q.1 Attempt the following specifying the reason:

a) An offer made by Sudhir on Jan 15 to take shares in RTD Ltd. The acceptance received on Sep 23. Is this a valid acceptance?

b) A minor obtained loan from plaintiff by fraudulently misrepresenting that he was of full age at the time of contract. On his refusal to pay, the money lenders sued him for money. It was held that the minor has sold the goods or converted them. Can the money be recovered?

c) Mahender saves Yash's life. Yash promises to pay Mahender ₹10000 out of gratitude. Will this be considered as valid consideration?

Q.2 In light of Sale of Goods Act, 1930, discuss the Rights of an unpaid seller.

Q.3 Rajender wants to incorporate a private company with Brajesh. Explain the various steps and documents required to incorporate a private company.

Q.4 A Minor cannot enter into a contract. Do you agree with the statement? Justify your answer.

Q.5 Explain the term Deficiency under Consumer protection Act, 1986. What are the remedies available to a consumer for deficiency under Consumer protection Act, 1986?

Q.6 Write Short Notes on the following:

a) Competition Commission of India

b) Digital Signature

The centroids of the three clusters in terms of ('alcohol' , 'alkalinity of ash') are (10.88, 12.83) , (12.37, 20.46) and (14.44, 28.71) respectively. To which cluster, a new wine (say, wine 21) with ('alcohol' , 'alkalinity of ash') as (12,12) shall be assigned based on Euclidean Distance measure. Illustrate with computations. **5 Marks**

5. [i] The following table gives the demand (Kg) and price (Rs/Kg) figures for a commodity for 6 days. Fit the regression P = a + b*D (Where P: Price, D: Demand; a and b are constants). Present the calculations involved.

Days	1	2	3	4	5	6
Price	22	30	25	20	15	8
Demand	10	12	15	20	23	28

Estimate the price when demand is 22? **5 Marks**

[ii] You have been asked to assess performance of a B-School. Keeping in view various aspects of a B-school performance, what are the different types of data which you consider important to collect for this. **5 Marks**

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

i. Difference among descriptive, predictive and prescriptive analytics using suitable illustrations
ii. Type I and Type II errors in Hypothesis Testing
iii. Dimensions of data quality with illustrations
iv. Key stages in a business analytics project

-END-

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THIRD SEMESTER **MBA**

SUPPLEMENTARY EXAMINATION ***FEB-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. The range for R square is :
(a) 0 to 1 (b) 0 to ∞ (c) -∞ to ∞ (d) -1 to 1

ii. If there is multi-collinearity in a regression model, the model can be used for making good predictions (True/False)

iii. Durbin-Watson statistic is used for testing presence of ----------

iv. The difference in means of two normally distributed populations can be tested using ----------
(t-test / Chi-square test / r-test)

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

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

P.T.O.

vii. *Every feasible solution to a linear programming problem P is also an optimal solution.(True/False)*

viii. In a logistic regression, the logit function is Log [P(Y=1)/ (1- P(Y=1))] = -4 + 0.25X. Then the equation for logit function Log [P(Y=0)/ (1- P(Y=0))] is (write the steps of solution):

a. -0.25 + 4X (b) 0.25 – 4X (c) 4 – 0.25X (d) 4 + 0.25X

ix. In ANOVA test, the hypothesis of no difference in population means is tested using:

(a)Omnibus test (b) Wald's test (c) F-test (d) z-test

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

SECTION B

2. [i] The liking for tourist places in respect of two persons is as follows:

Person 1 = {Mukteshwar, Mumbai, Dharamsala, Musoorie, Kanayakumari, Srinagar, Shillong}

Person 2= {Mukteshwar, Musoorie, Goa, Dharamsala, Shillong, Srinagar}

The places which are not included in a set are disliked by the respective persons. Considering liking as 1 and disliking as 0,

P.T.O.

present the above data in matrix form. Compute Jaccard coefficient and comment on similarity of the two persons. **5 Marks**

[ii]

Movie ratings given by two customers on a 5 point scale are as follows:

Customer	Ghajini	Dilwale	Uri	Guide	Don	Hero
Customer 1	5	1	5	5	1	1
Customer 2	1	5	1	1	5	5

Compute Cosine coefficient and comment on the similarity of the customer ratings. **5 Marks**

3. [i] What are the challenges which are likely to be faced during data pre-processing stage of an analytics project. Explain with suitable illustrations. **5 Marks**

[ii] The following are sample tuples from employee database of a startup:

Name	Gender	Date of Birth	Joining Date	Skill	Experience (years)	Performance Score	Rank
Amit	M	01-07-1990	11-07-2018	IT	3	90	5
Smita	F	01-09-1991	03-09-2018	Design	1	85	3
---		---	---	---	---	---	---

Specify attribute type for each attribute. What type of transformation is possible on each attribute type? **5 Marks**

4. [i] What is the difference between training and testing data sets? **5 Marks**

[ii] Twenty (20) types of wines (labeled as 1 to 20) are clustered based on their 'alcohol' and 'alkalinity of ash' contents as follows:

Cluster 1 - {2,6,7,10,11,15,17,18}, Cluster 2 - {3,4,8,13,20}

Cluster 3- {1,5,9,12,14,16,19}

P.T.O.

a) What type of defensive strategy is the company trying to follow and why? Justify your answer by giving relevant facts. What are the benefits of adopting such a strategy? (4)

b) In your opinion, how are the competitors going to react, because of BMW adopting such a strategy? What all alternatives are available to the traditional competitors (like Mercedes-Benz and Audi) to deal with this strategy? Also, what type of strategies, new competitors like Tesla Motors Inc. and Apple Inc. can adopt? (5)

c) You have been hired as a consultant by the company to advise it on various alternatives which it can take to protect its market share. What suggestions will you give? (3)

END

P. T.O.

Total no. of pages-4 *Roll No.*_____

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

SUPPLEMENTARY EXAMINATION **FEB - 2019**

MGT 33: STRATEGIC MANAGEMENT

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

Instructions: Attempt any 4 questions (from Q.1-Q.5). Question No. 6 is compulsory. All questions carry equal marks.

1(a) "A vision is too abstract to be of any practical value". Do you agree with this statement? Why? What are the essential characteristics of a vision statement? (6)

1(b) 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)

2(a) "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 effectively. (6)

2(b) 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)

1 - 12 -

3(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)

3(b) Explain the kind of corporate level strategies which might be used in the following cases:

i. A leading producer of tooth paste, advises its customers to brush teeth twice a day to keep breath fresh.

ii. A renowned auto manufacturing company launches ungeared scooters in the market.

iii. HCL, Microsoft to launch Internet incubation center in Redmond. (3*2=6)

4(a) Write short notes on the following:

(i) Blue Ocean and Red Ocean strategy

(ii) Resource Based View to Environmental analysis (6)

4(b) Identify and explain the business model being adopted by the following companies:

(i) Walt Disney

(ii) Quikr

(iii) Reliance Telecom (6)

5(a) Comment on the following with suitable examples:

(i) "Even though a distinctive competency is considered to be corporations' key strength, a key strength may not always be a distinctive competency."

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

5(b) As per the Strategic Outsourcing Process suggested by Mark Gottfredson, Rudy Puryear, and Stephen Phillips in their research article 'Strategic Sourcing: From Periphery to the Core', determine whether the following activities can be outsourced or not?

(i) Steel Manufacturing for Automobile industry

(ii) Assembling for Electronics industry (6)

6. BMW plans to roll out more electric cars and add self-driving features faster than rivals to help fend off growing threats to its status as the world's biggest maker of luxury vehicles.

The German carmaker will also roll out more SUVs including the full-sized X7 as well as more versions of high-end models like the 7-series sedan, the company said today in a statement. The two-pronged approach is the center piece of a strategy review by CEO Harald Krueger and is aimed at maintaining pre-tax profit margins at a minimum of 10 percent through 2020.

BMW said it will launch a roadster version of its i8 plug-in hybrid sports car, along with a new version of its i3 compact EV with increased battery capacity and a longer range, as well as a plug-in hybrid for its Mini brand.

A decade after taking the top spot in the global luxury-car market, BMW is at a crossroads. Years of rolling out new models ranging from coupe-like SUVs to seven-seat wagons have left the company with few niches that could spur growth. Rival Daimler AG has a chance to reclaim the crown as early as this year after catching up to BMW with a slew of new models and upgrades of its bestsellers.

Unlike rivals Mercedes-Benz and Audi, the owner of the BMW, Rolls-Royce and Mini brands isn't part of a broader group, meaning it has to absorb the costs of developing these new technologies on the strength of its current offering. Growth though is slowing as Daimler AG's Mercedes and Volkswagen AG's Audi push for the No. 1 spot, and brands including Maserati, Jaguar and Alfa Romeo expand to give luxury-car buyers more options.

"There's not much they can do in terms of adding more products," Dominic O'Brien, a London-based analyst with Exane BNP Paribas, said before BMW released the strategy report. "The three key themes of emissions reduction, connected cars and autonomous driving will keep spending on research and development at an elevated level."

In addition to battling its traditional rivals, BMW also faces the emergence of new competitors like Tesla Motors Inc. and potentially Apple Inc. The company outlined its view of future luxury autos last week when it presented a concept vehicle where the steering wheel and center console retract, enabling the driver to turn to face the front passenger.

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3rd Semester MBA

SUPPLEMENTARY EXAMINATION- FEB, 2019

PAPER CODE: MGH-01 TITLE OF PAPER- Industrial Relations & Labour Legislation

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

All Questions are compulsory.

1. Write short note on the followings: (2.5 *6 =15 marks)
   a) Growth of trade union in India
   b) Workers' participation in management
   c) Causes of employee grievances
   d) Collective Bargaining
   e) The Industrial Employment (Standing Orders) Act 1972
   f) Factors affecting industrial relation

2. How do you visualise the future of industrial relations in India ? (10 marks)

3. Discuss various provisions of Settlement Machinery for Industrial Disputes as per Industrial Dispute Act 1947. (10 marks)

4. "Strike is a necessary evil". Critically analyze the statement in the light of radical approach to IR, provisions of factory act, 1948 and the Essential Services Maintenance Act (ESMA). (10 marks)

5. Discuss provisions of employees' health and safety as per chapter-III and chapter-IV of factory act, 1948. (15 marks)

Total No of Pages 01 — 15 — *Roll. No.....*

THIRD SEMESTER **MBA**

SUPPLEMENTARY EXAMINATION **FEBRUARY- 2019**

MGH – 031 (ORGANIZATIONAL DEVELOPMEDNT)

Time: 03:00 Hours **Max. Marks: 60**

Note: Answer any ***FIVE*** questions.
All questions carry equal marks.

1. Define organizational development. Discuss the process involved in managing organizational development. You can give the real case of some organization also.
2. Why is organizational change generally resisted by employees? Discuss how organizational change can be effected in an organization.
3. "Suppose Hindustan Paper Corporation (HPC) is proposing to reduce its employee turnover from 25% to 15% within six months." Explain this with Kurt Lewin's Force Field Analysis.
4. Discuss the major diagnostic methods used in organization development. Which one do you think more suitable for an educational institution and why?
5. What is meant by 'Management By Objectives (MBO)'? Elaborate the process involved in MBO.
6. What is meant by learning organization? How is leaning organization different from normal organization? What makes an organization as learning organization.
7. Explain the role of OD practitioners as Agents of Social Change. Highlight the future of OD in a VUCA World (Volatility, Uncertainty, Complexity, Ambiguity).

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Total No. of pages: 2

Roll No.....

FIRST SEMESTER

EMBA

SUPPLEMENTARY EXAMINATION

(FEB-2019)

EMBA-102 FINANCIAL ACCOUNTING

Time: 3 Hours

Max. Marks: 60

Note: Answer all five questions

Q.1. What are financial statements ? Discuss about the different types of financial statement and informational needs of different stakeholders ?

Q.2. From the following information, calculate Debt Equity Ratio, Total Assets to Debt Ratio, Proprietary Ratio, and Debt to Capital Employed Ratio:

BALANCE SHEET AS ON 31ST MARCH, 2018

Particulars	Note No.	Rs.
I. Equity and Liabilities:		
1. Shareholders' funds		
a) Share capital		4,00,000
b) Reserves and surplus		1,00,000
2. Non-current Liabilities		
Long-term borrowings		1,50,000
3. Current Liabilities		50,000
		7,00,000
II. Assets		
1. Non-current Assets		
a) Fixed assets		4,00,000
b) Non-current investments		1,00,000
2. Current Assets		2,00,000
		7,00,000

Q.3. The debt equity ratio of X Ltd. is 0.5 : 1. Which of the following would increase/ decrease or not change the debt equity ratio?

(i) Further issue of equity shares

(ii) Cash received from debtors

(iii) Sale of goods on cash basis

(iv) Redemption of debentures

(v) Purchase of goods on credit.

P.T.O.

Q.4. M/s Shyam and Bros. purchased a plant for Rs. 5,00,000 on April, 01 2017, and spent Rs. 50,000 for installation. The salvage value of the plant after its useful life of 10 years is estimated to be Rs. 10,0 Record journal entries for the year 2017-18 and draw up Plant Account and Depreciation Account for th three years given that the depreciation is charged using straight line method if : (i) The books of accou close on March 31 every year; and (ii) The firm charges depreciation to the asset account.

Q.5. Amit sold goods for Rs.20,000 to Sumit on credit on Jan 01, 2015. Amit drew a bill of exchange upon Sumit for the same amount for three months. Sumit accepted the bill and returned it to Amit. Sumit met his acceptance on maturity. Record the necessary journal entries under the following circumstances:

(i) Amit retained the bill till the date of its maturity and collected directly

(ii) Amit discounted the bill @ 12% p.a from his bank

(iii) Amit endorsed the bill to his creditor Ankit

(iv) Amit retained the bill and on March, 31 2015 Amit sent the bill for collection to its bank. On April 05, 2015 bank advice was received.

Total No. of Pages 01 — 18 — *Roll No. .....*

I SEMESTER **EMBA**

Supplementary-OddNov/Dec Examination **Feb.2019**

PAPER CODE : EMBA103 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. What are the major components of macro marketing environment? Explain in detail the ways socio-cultural and political and legal environment may affect the eco-system of an industry.

2. Differentiate between above the line and below the line media. Design a suitable Integrated Marketing Communication (IMC) campaign for an exotic flavour of milk (available in flavours such as strawberry, caramel, mocha walnut, chocolate etc.) with price points of INR 30 for a 100 ml pack. The maximum budget available for a one month long campaign is INR 200,000 only. You are free to make suitable assumptions.

3. What do you mean by positioning? What are the important positioning mantra being used by Indian FMCG marketers? How would you position a low cost brand of olive oil imported from Africa?

4. "Pricing is a weapon in the hands of marketer which can kill the competitors" Comment. What are various ways in which a firm can move competition away from price to non price competition?

5. Explain the concept of Product Life Cycle (PLC). What are the major criticisms of PLC concept? What strategy would you suggest for a product which is in the maturity stage of PLC?

6. How does a sound and effective distribution provide a sustainable competitive advantage to a firm? Design a suitable distribution channel strategy for low cost value for money health band wishes to enter in north Indian market. Make suitable assumptions to support your answer.

Total No. of Pages: 2

Roll no.....

FIRST SEMESTER
SUPPLEMENTARY EXAMINATION

MBA (EXECUTIVE)
FEB - 2019

EMBA-104 MANAGERIAL ECONOMICS

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

Note: Q6 is compulsory. Attempt any FOUR questions from Q1-5. All questions carry equal Marks. Assume suitable missing data, if any.

Q1. (a) Dell faced the dilemma regarding its pricing strategy for computers. Should it increase its prices to boost cash flow or adopt a price cut strategy? How and what should the company decide?

[6 marks]

(b) The research department of a company estimated price elasticity of demand of computers = − 1.7. If company cuts the price by 5% will company sales increase enough to increase overall revenues? Interpret your answer.

[6 marks]

Q2. (a) 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 marks]

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

[6 marks]

Q3. (a) Explain the law of diminishing marginal returns with the help of a suitable example and diagram. Why a producer chooses second stage of production?

[6 marks]

P.T.O.

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

Q4. (a) How does presence of monopoly lead to deadweight loss as compared to competitive conditions? Explain. **[8 marks]**

(b) A sales tax of Re. 1 per unit of output is levied on a firm whose output sells for Rs. 5 in a competitive industry.

(i) How does this tax affect the cost curves of the firm?

(ii) What will happen to price, output, and profit? **[4 marks]**

Q5. (a) The vegetable street market is an example of which market structure. Explain the basic features of such a market structure. **[8 marks]**

(b) What do you mean by third degree price discrimination? When can a monopolist practice price discrimination? **[4 marks]**

Q6. Attempt all of the following:

(a) Do improvements in technology lead to a movement along, or a shift in the supply curve?

(b) Differentiate between producer surplus and consumer surplus using IC analysis.

(d) What are the conditions of profit maximization of a firm using marginal principle?

(e) Differentiate between Learning effect and economies of scale using cost curve. **[3*4=12 marks]**

-END-

Assign the programmers to applications in such a way that the total computer time is minimum.

6 Marks

Q5. A furniture dealer deals in only tables and chairs. He has Rs. 5000 to invest and a space to store at most 60 items. A table costs him Rs. 250 and a chair Rs. 50. He can sell a table at a profit of Rs.50 and a chair at a profit of Rs. 15.

[a] Assuming that he can sell all the items that he buys, formulate a linear programming problem of the model. **4 Marks**

[b] Solve the problem using Graphical Method. **8 Marks**

Q6. [a]Explain the role of statistics in effective decision making by taking a suitable illustration from your own or any other organization. **6 Marks**

[b] Suggest different types of data and statistical measures which can be used by the Head of a University to monitor performance of the University. **6 Marks**

Q[7]. Write short notes on **any two** of the following: **6X2 = 12Marks**

i. Different types of data with examples
ii. Type I and Type II Errors in Hypothesis Testing
iii. Applications of Chi Square Test
iv. Role of Statistical Division in an organization

-END-

Total No. of Pages 04

SEMESTER FIRST *Roll No. .....*

EMBA

SUPPLEMANTARY EXAMINATION ***FEB-2019***

EMBA-105 QUANTITATIVE METHODS

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

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

SECTION A

1. You are required to write True/False, choose correct option(s) or solve or fill in the blanks. Each part is of 1 mark. **12 Marks**

i. The mean and variance of Bernoulli probability distribution function are same. (True/False)
ii. If P(A) = 0.3, P(B) = 0.7, P(A ∩B) = 0.2, find P(A U B).
iii. The total area under the curve for a probability distribution function is equal to -----.
iv. A random variable which follows Normal distribution can take values in the range --------
v. If X is normally distributed with mean 18 and standard deviation 2.5, find the value k such that P(X < k) = 0.5
vi. The value of a fair game is zero. (True/False)
vii. In an LP problem, at least one corner points must be an optimal solution if an optimal solution exists. (True/False)
viii. A feasible solution to an LP problem may not be an optimal solution (True/False)
ix. If P(A) = 0.8, P(B) = 0, what is P(A ∩ B) given that A and B are independent events?
x. The mean and median of a random variable following Normal distribution are not same. (True/False)
xi. A random variable which follows Binomial probability function can have mean 8 and variance 10. (True/False)

P.T.O.

xii. Assignment Problem is a special type of Linear Programming Problem (True/False)

SECTION B

Q2. [a] Write the purpose of Hypothesis Testing and the steps involved in Hypotheses Testing. **6 Marks**

[b] Two types of cars (say A and B) manufactured in India are tested for petrol mileage. A sample consisting of 36 cars of type A averaged 14 km per litre. Another sample consisting of 72 cars of type B averaged 12.5 km per litre. Assuming normal populations with respect to mileage and given that population variances are 1.5 and 2.0, test whether there exist a significant difference in the petrol consumption of these two types of cars. Use $\alpha = 0.01$. [Given P ($z < 2.58$ = 0.995) and P($z < 2.33 = 0.99$)] **6 Marks**

Q3. [a] A researcher randomly divides 24 students into 3 groups of 8. All students study the same chapter for 30 minutes. Group 1 students study with background sound at a constant volume in the background. Group 2 studies with noise that changes volume periodically. Group 3 studies with no sound at all. The students then take a 10 point multiple choice test on the chapter studied. Their scores are:

Constant Sound	Random Sound	No Sound
7	5	2
4	5	4
6	3	7
8	4	1
6	4	2
6	7	1
2	2	5
9	2	5

Test at 5% level of significance if there is a significant difference in the mean scores due different sound effects [Given approx. values: F(1, 21, .05) = 4.32 , F(2, 21, 0.05) = 3.44 , F(21,1, 0.05) = 248, F(21,2, .05)= 19.4]

8 Marks

P.T.O.

[b]. The observed data based on a 'Hotel Guest Satisfaction Survey' is as follows:

Choose Hotel Again?	HOTEL		
	A	B	Total
Yes	163	154	317
No	64	108	172
Total	227	262	489

Test the hypothesis that population proportion of guests who would return to Hotel A equals the population proportion of guests who would return to Hotel B. **(Given:** Critical value of Chi-Square Distribution at 5% level of significance with 1, 2 and 4 degrees of freedom are respectively 3.841, 5.991 and 9.488) **4 Marks**

Q4. [a] Consider the following transportation problem involving three factories and three warehouses. The cell entries represent the cost of transportation per unit. Find the initial basic feasible solution **using ANY** method. **6 Marks**

		Warehouse			
		W1	W2	W3	Supply
FACTORY	F1	5	4	3	100
	F2	8	4	3	300
	F3	9	7	5	300
Demand		300	200	200	700

[b] A software project team has 3 programmers with different development capabilities. The project involved development of 3 applications. The Project Head estimates the computer time in minutes required by the programmers for the applications as follows:

		Programmers		
		A	B	C
Applications	1	120	100	80
	2	80	90	110
	3	110	140	120

Total No. of Pages _03

1st SEMESTER

Course: MBA

Delhi Technological University
Delhi School of Management

END SEMESTER EXAMINATION (Supplementary)
FEB-2019

EMBA106, Production and Operations Management

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

Note : Answer any FIVE questions.
All questions carry equal marks.
Assume suitable missing data, if any.
Use of Statistical Chart is allowed

1. (a) What are the different types of the production systems? Write the merits and demerits of each of them.

(b) Explain the methods used for decision making under uncertainty.

(c) A company XYZ is thinking about the three decision alternatives: introduction of a new product by replacing the existing product at a much higher price (S_1) or effecting a moderate change in the composition of the existing product at a small increase in price (S_2) or bringing a minor change in the composition of the existing product with a negligible increase in price (S_3). The three possible states of nature or events are: high increase in sales (N_1), no change in sales (N_2) and decrease in sales (N_3). The marketing department of the company has worked out the payoffs in terms of yearly net profits for the strategies of each of the three events (expected sales). The

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profits (payoffs) for different courses of action under various states of nature are shown in Table 1 [3+3+6]

Table 1:

Strategy	State of nature		
	N_1	N_2	N_3
S_1	750,000	350,000	200,000
S_2	550,000	500,000	50,000
S_3	350,000	350,000	350,000

2. (a) Discuss the steps of making a forecast?
   (b) Write the disadvantages of the qualitative forecasting.
   (c) Using the data given in Table 2, forecast the demand for the periods using the exponential smoothing method ($\alpha = 0.3$ and $\alpha = 0.5$). Also, compare the results graphically.

Table 2: [3+3+6]

Month (t)	1	2	3	4	5	6	7	8	9	10	11	12
Demand (D_t)	600	628	670	735	809	870	800	708	842	870	739	–

3. (a) Discuss the method of work sampling.
   (b) Explain the term THERBLIG and its use in the work study.
   (c) The average actual times for the five elements of a task were measured and shown in Table 3. The predetermined motion times for three elements are also given. Calculate the performance rating factor.

Table 3: [3+3+6]

Element No.	1	2	3	4	5
Avg. actual time, A (min.)	0.12	0.14	0.22	0.34	0.12
Predetermined motion time (P)	0.14	-	0.20	-	0.10

4. (a) Discuss the use of quality function deployment. Prepare a House of Quality for a product of your choice? [6]
   (b) Explain the method of design of a completely new product. What are the different types of feasibility study you would like to do before starting the design of a new product? [6]
5. (a) Write the factors influencing the decision related to the facility location. Explain each how do they influence the decision regarding the same?
   (b) Write the strategies used to meet the fluctuating demand in the marking incorporating the concepts of Aggregate planning.
   (c) The time estimates in weeks for the activities of a PERT network are given in Table 4. [3+3+6]

Table 4

Activity	Optimistic time (t_o)	Most likely time (t_m)	Pessimistic time (t_p)
A-B	1	1	7
A-C	2	5	8
A-D	2	2	8
C-E	3	6	15
D-E	1	4	7
E-F	2	5	14
B-F	2	5	8

I. Draw the network diagram.
II. Calculate the earliest start (ES) and latest start (LS) for all the activities
III. Determine the project completion time.
IV. Calculate the standard deviation and variance of the project.

6. Write Short notes on the following: [3×4=12]
   (a) Properties of O C Curve
   (b) Deming's 14 Points
   (c) Sequential sampling plan
   (d) Pareto Analysis

Total no. of pages-3 *Roll No.*_____

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

SUPPLEMENTARY EXAMINATION **FEB - 2019**

EMBA-301: STRATEGIC MANAGEMENT

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

Instructions: Attempt any 4 questions (from Q.1-Q.5). Question No. 6 is compulsory. All questions carry equal marks.

1(a) Explain the different kinds of business level strategies. State the type of business level strategy which might be used in the following cases:
i. Small pizza place in crowded college,
ii. Detergent manufacturing seeking to bring out new product in an established market
iii. New mobile phone company (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 effectively. (6)

2(a) Explain the BCG Matrix. Identify the following products of Google Company in which quadrant of BCG matrix do they fall into:
i. Google Search Engine
ii. Google Ads
iii. Google Wallet
iv. Google Nexus Phone (6)

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2(b) 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. An old company had been facing financial issues for many years and is willing to give up its independence in exchange for security.
iii. Askme Bazaar is launching Askme Fresh (perishable grocery) and Askme Meds (health services) (3*2=6)

3(a)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. *HUL introduces Knorr instant noodles to compete with Nestle Maggi.*
iii. *Reliance trends attacked on Shoppers stop, lifestyle, big bazaar in terms of fashion, features, user preferences and anything that might interest the consumer.*
iv. *Samsung Galaxy Note 9 attack on Apple iPhone X in terms of pricing, features, user preferences and anything that might interest the consumer.*
v. *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.*
vi. Toshiba used superior technology to upgrade picture quality standards to launch a new range of televisions which used flat square tube technology. (6)

3(b) "It is no longer a company's ownership of capabilities which matter, but, what matter is its ability to make the most of available critical capabilities whether they reside inside or outside the company." In view of above, explain the steps involved in outsourcing process as suggested by Mark Gottfredson, Rudy Puryear, and Stephen Phillips in their research article 'Strategic Sourcing: From Periphery to the Core'. (6)

4(a) "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)

4(b) Write short notes on the following
a. Balanced Score Card
b. Six Sigma (6)

5(a)"Some decisions are made in a flash by one person (entrepreneur or CEO) who has brilliant insight and is quickly able to convince others to adopt his idea. Other decisions are develop out of a series of small choices that over time pushes an organization move in one direction." In the light of the above statement, explain the different modes of strategic decision making with the help of suitable examples. (6)

5(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)

6. Meters Limited is a company engaged in the designing, manufacturing, and marketing of instruments like speed meters, oil pressure gauges, and so on, that are fitted into two and four wheelers. Their current investment in assets is around Rs. 5 crores and their last year turnover was Rs. 15 crores, just adequate enough to breakeven. The company has been witnessing over the last couple of years, a fall in their market share prices since many customers are switching over to a new range of electronic instruments from the range of mechanical instruments that have been the mainstay of Meters Limited. The Company has received a firm offer of cooperation from a competitor who is similarly placed in respect of product range. The offer implied the following: (i) transfer of the manufacturing line from the competitor to Meters Limited; (ii) manufacture of mechanical instruments by Meters Limited for the competitor to the latter specifications and brand name; and (iii) marketing by the competitor. The benefits that will accrue to Meters Limited will be better utilization of its installed capacity and appropriate financial compensation for the manufacturing effort. The production manager of Meters Limited has welcomed the proposal and points out that it will enable the company to make profits. The sales manager is doubtful about the same since the demand for mechanical instruments in shrinking. The chief Executive is studying the offer.
Q1. What type of strategy has been proposed by the competitive firm? What benefits Meters Limited will get by accepting the proposal? (4)
Q2. What is stability strategy? Should Meters Limited adopt it? (4)
Q3. What are your suggestions to the Chief Executive? (4)

END

Total No. of Pages 03

Roll No. .....

THIRD SEMESTER

EMBA (Odd)

END SEMESTER EXAMINATION ***February -2019***

EMBA-303 Information Technology Management

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. A firm's revenue model describes how the firm will earn revenue, generate profits, and produce a superior return on investment. Evaluate the E-commerce revenue models.

ii. Elaborate E-commerce framework.

iii. Define E-governance and elaborate using suitable examples.

[b] XYZ-Mobile has launched aggressive campaigns to attract customers with lower mobile phone prices, and it has added to its customer base. However, management wants to know if there are other ways of luring and keeping customers. Are customers concerned about the level of customer service, uneven network coverage, or data plans? How can the company use information systems to help find the answer? What management decisions could be made using information from these systems? [6]

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

i. Examine the latest trends in computer hardware and software platforms.

ii. Define Cloud computing and provide details of cloud services.

iii. Elaborate using suitable examples the model used to analyse the direct and indirect costs to help firms determine the actual cost of specific technology implementations.

P.T.O.

[b] Gifty is an online e-tailer for handmade gifts. Customers can purchase either via its Web site or via a mobile app. Prepare a security analysis for this Internet-based business. What kinds of threats should it anticipate? What would be their impact on the business? What steps can it take to prevent damage to its Web sites and continuing operations? [6]

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

i. Discuss the role of organisation levels and organization culture in the development of information systems.

ii. Explain the types of Computer-Based Information Systems (CBISs).

iii. Describe the business impact of cloud computing, mobile platform and Internet of Things.

[b] ABC is a small family hardware store in Delhi, India. The owners must use every square foot of store space as profitably as possible. They have never kept detailed inventory or sales records. As soon as a shipment of goods arrives, the items are immediately placed on store shelves. Invoices from suppliers are only kept for tax purposes. When an item is sold, the item number and price are rung up at the cash register. The owners use their own judgement in identifying items that need to be reordered. What is the business impact of this situation? How could information systems help the owners run their business? What data should these systems capture? What decisions could the system improve? [6]

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

i. It has been said that the advantage that leading-edge retailers such as Dell and Walmart have over their competition isn't technology; it's their management. Do you agree? Why or why not?

ii. Explain the challenges posed by strategic information systems.

iii. Describe Customer Relationship Management (CRM) systems.

P.T.O.

[b] How do Porter's competitive forces model, the value chain model, synergies, core competencies, and network economics help companies develop competitive strategies using information systems? [6]

a. Define Porter's competitive forces model and explain how it works.

b. List and describe four competitive strategies enabled by information systems that firms can pursue.

c. Explain with suitable examples how management of a firm can achieve alignment of IT with business objectives.

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

i. Why is data integration required in a data warehouse, more so than in an operational application?

ii. Elaborate the challenges involved in adopting AGILE methodology of SDLC.

iii. Differentiate between Data warehouse and Data mart.

[b] Select a Web site of your choice. Prepare a report analysing the various functions provided by that Web site and its information requirements. Your report should answer these questions: What functions does the Web site perform? What data does it use? What are its inputs, outputs, and processes? What are some of its other design specifications? Does the Web site link to any internal systems or systems of other organizations? What value does this Web site provide the firm? [6]

END

Total No. of Pages : 1 Roll no .....

3rd SEMESTER MBA[Executive]

SUPPLEMENTARY EXAMINATION FEB 2019

EKTM-04: Data Base Management

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

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

Q.1 [a] What is a Transaction. Discuss its ACID Properties. 6 Marks

[b] Differentiate between Super key, Candidate Key, Primary Key and Foreign Key 6 Marks

Q.2 [a] Differentiate between Network model and Hierarchal Model. 6 Marks

[b] Differentiate between NoSQL Databases from Relational Databases. 6 Marks

Q.3[a] What is Lock-Based Protocol in Concurrency Control. Explain Deadlock. 6 Mark

[b] Illustrate with example different types of joins. 6 Mark

Q.4 Attempt Any two:

[a] Explain with example first normalization. 6 Marks

[b] Explain with example Second normalization. 6 Marks

[c] Explain with example Third normalization. 6 Marks

Q.5 Attempt any two:

[a] Define data warehouse. Explain its properties. 6 Marks

[b] Explain different Data warehouse schemas. 6 Mark

[c] Describe with diagram Data Mart and Data Cube. 6 Marks

-END-

Total No of Pages 02

Roll. No.....

FIRST SEMESTER **MBA (Business Analytics)**

SUPPLEMENTARY EXAMINATION **FEB- 2019**

MB 102 (MARKETING MANAGAMENT)

Time: 03:00 Hours **Max.Marks: 60**

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

Instructions: Attempt any two questions in Section A. Both questions in Section B are compulsory.

Section A

1. A. Discuss the different levels of a product. To your best understanding, what could the levels of the following **(any one)**:
   a. Air Travel
   b. Automobile (7.5)

   B. Explain the product life cycle. How do marketing strategies and consumer characteristics vary across the life cycle? (7.5)

2. A. Develop a hypothetical perceptual map for any one of the following product categories. Justify your assumptions for the choice of attributes for the two axes. (7.5)
   a. Juice based drinks (JBDs)
   b. Smartphones

   B. Discuss the four types of buying behavior, classified on the basis of level of involvement and differences between brands. Give examples of each type. (7.5)

3. A. Select and explain a suitable pricing strategy (or strategies) for each of the following: (3*3=9)
   a. Premium branded Atta
   b. Fitness band
   c. Life Insurance

   B. Discuss some important considerations in choosing a channel design strategy. Discuss the differences between direct and indirect distribution channels (6)

P. T.O.

Section B

4. Write short notes on the following with appropriate examples: (Any 3, 5*3=15)
   i. Cost-plus Pricing
   ii. Bulk breaking & Assortment Building
   iii. Vertical Marketing Systems
   iv. Push vs Pull Promotion Strategies

2. What are the various components of a marketing plan? Develop a comprehensive marketing plan for a Bollywood movie. (15)

Total No of Pages 01 — 64 — *Roll. No.....*

FIRST SEMESTER
End Semester Supplementary Examination
MB-105
Time: 03:00 Hours

MBA (BA)
February- 2019
Managerial Economics
Max. Marks: 60

Note: *Attempt any four questions from Section A and any four questions from Section B.*

SECTION-A

Q.1- Define inferior and normal goods. Explain substitution effect in case of normal goods. (10)

Q.2- How is price determined under monopoly competition? Explain the role of elasticity in case of monopoly market. (10)

Q.3- Explain consumers' equilibrium through indifference curve. (10)

Q.4- Explain the law of returns to scale. What are the reasons behind increasing returns to scale. (10)

Q.5- Briefly explain monetary policy of India. How does Cash Reserve Ratio (CRR) and Bank rate help in correcting inflationary situation in the economy? (10)

SECTION-B

Q.6- What is budget line? Explain the main properties of indifference curve. (5)

Q.7- What is the difference between shifting of demand curve and movement along demand curve? (5)

Q.8- Explain the law of diminishing marginal utility. (5)

Q.9- Analyse the impact of privatization on agricultural sector of India. (5)

Q.10- Explain the following concepts: (5)

a) Price elasticity of demand b) Oligopoly c) Peak load pricing
d) Penetrating pricing e) Price Discrimination

Total No. of Page: 1

1st Semester MBA (Business Analytics)

SUPPLEMENTARY EXAMINATION- FEB, 2019

PAPER CODE: MB-106 TITLE OF PAPER-Business Communication

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

All Questions are compulsory.

1. Write short note on the followings: (4*5 =20 marks)
   a) Proxemics
   b) Paralanguage
   c) Deductive and Inductive approach of writing business letters
   d) Barriers and Facilitators in communication
   e) Corporate Communication

2. "People reading or hearing same message can disagree on its discussion". Critically analyze the statement in light of cross cultural communication values.

   (10 Marks)

3. Discuss how the emergence of social media has drastically modified the 7C's of the business communications.

   (10 Marks)

4. Write a report to your instructor in which you agree for or against the following:

   Students of MBA should take course of Business Communication during their Masters.

   (10 Marks)

Total No. of Pages: 02 *Roll. No.....*

FIRST SEMESTER **MBA (Business Analytics)**

END SEMESTER EXAMINATION- Feb-2019

Supplementary - Feb-2019

MB-107(Introduction to Business Analytics)

Time: 03:00 Hours **Max. Marks: 60**

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

Q1: (a) Explain various applications of Business Analytics

(b) Differentiate between Business Analytics and Business Intelligence

Q2: (a) Describe various characteristics of 'Big Data'? How Big Data plays a important role in decision-making process?

(b) "Analytics starts with Descriptive Statistics" Explain.

Q3: The International Organization of Motor Vehicle Manufacturers (officially known as the Organisation Internationale des Constructeurs d'Automobiles, OICA) provides data on worldwide vehicle production by manufacturer. The following table shows vehicle production numbers for four different manufacturers for five recent years. Data are in millions of vehicles.

Manufacturer	Year 1	Year 2	Year 3	Year 4	Year 5
Toyota	8.04	8.53	9.24	7.23	8.56
GM	8.97	9.35	8.28	6.46	8.48
Volkswagen	5.68	6.27	6.44	6.07	7.34
Hyundai	2.51	2.62	2.78	4.65	5.76

(a) Construct a line chart for the time series data for years 1 through 5 showing the number of vehicles manufactured by each automotive company. Show the time series for all four manufacturers on the same graph.

(b) What does the line chart indicate about vehicle production amounts between years 1 through 5? Discuss.

Q4: Read the following scenario and write various steps to build a mathematical model. Students who are trying to raise funds have an agreement with a local pizza chain. The chain has agreed to sell them pizzas at a discount, which the students can then resell to families in the local community for a profit. It is expected that of the 500 families in the community, at most 70% will buy pizza. Based on a survey of their personal preferences, the students believe that they should order no more than 120 cheese pizzas, nomore than 150 pepperoni pizzas, and no more than100 vegetarian pizzas. They also want to make surethat at least 20% of the total pizzas are cheese and at least 50% of the pizzas are pepperoni. They make a profit of $1.45, $1.75, and $1.98, respectively, for each cheese, pepperoni, and vegetarian pizza they resell.

Q5: (a)

P. T.O -

CABINET STYLE	CARPENTRY	PAINTING	FINISHING	PROFIT
Italian	3.00	1.50	0.75	$72
French	2.25	1.00	0.75	$65
Caribbean	2.50	1.25	0.85	$78
Available hours	1,360	700	430	

Formulate a mathematical linear programming model that can be used to determine the maximise the profit by making different types of cabinets. Each type of cabinet is prepared by giving time, in hours, for carpentry, painting and finishing- as given in the table.

(b) In what conditions Integer and Binary linear models are used?

Q6: Describe various Resource Considerations to Support Business Analytics?

Q7: (a) What is the need for measurement? What are the characteristics of measures?

(b) Describe SMART test for ensuring metric relevance to business.

Total No. of Pages: 01

Roll. No.....

FIRST SEMESTER

MBA – Business Analytics

SUPPLEMENTARY EXAMINATION- FEB 2019

PAPER CODE: MB-108

TITLE OF PAPER- Database Management Systems

Time: 03:00 Hours

Max. Marks: 60

Note: Attempt questions from all sections as directed. Total No of Questions (9).
Marks are indicated against each question. Parts of a question must be answered together.

Section - A: Attempt any four questions out of five. Each question carries 06 marks. **[24 Marks]**

Q1. Explain the three different types of data anomalies with examples.

Q2. Describe the two integrity constraints with suitable examples.

Q3. What is the difference between Indexing and Hashing?

Q4. Differentiate between the following SQL commands/clauses with the help of an example:

(i) Select and Select distinct
(ii) Drop and Delete
(iii) Where and Having

Q5. When is functional dependency said to be the fully functional dependency? Explain with the help of example?

Section – B: Attempt any two questions out of three. Each question carries 08 marks. **[16 Marks]**

Q6. a) Differentiate between the following:

(i) Logical and Physical data independence
(ii) Super key and Candidate key

b) Explain the following with example/ ER diagram:

(i) Tuple and Attribute
(ii) Ternary Relationship

Q7. What is normalization? Explain its need. Discuss 1NF, 2NF and 3 NF normal forms using an example.

Q8. Describe the three-schema architecture of database approach for a DBMS with the help of a block diagram.

Section - C: Compulsory Question **[20 Marks]**

Q9.) Write SQL Queries for the following and also write the output for the same.

a) Create a database having two tables with the specified fields, to computerize a library system of a college

LibraryBooks (Accession number, Title, Author, Department, PurchaseDate, Price)
IssuedBooks (Accession number, Borrower)

b) Identify primary and foreign keys. Insert at least 5 records in each table.

c) Delete the record of book titled "Database System Concepts".

d) Change the Department of the book titled "Data Mining" to "CS".

e) List all books that belong to "CS" department.

f) List all books that belong to "CS" department and are written by author "Navathe".

g) List all computer (Department="CS") that have been issued.

h) List all books which have a price less than 400 or purchased between "01/01/1999" and "01/01/2002".

***

Total No of Pages 01 - 43 - *Roll. No.....*

FIRST SEMESTER **BA (H) ECONOMICS**
End Semester Supplementary Examination **February- 2019**
BA-101 **Introductory Microeconomics**
Time: 03:00 Hours **Max. Marks: 75**

Note: Instructions: Attempt ***any* 5** questions out of 7; Draw neat diagrams and name the axes.

1. Describe the "central problems" of resource allocation in economy. What are the properties of production possibility curve? (15)
2. What is binding price ceiling? Explain its impact on competitive market. (15)
3. What are the properties of Indifference curve? Explain the following:
   a) Consumers' equilibrium through indifference curve approach.
   b) Income effect in normal & inferior goods. (15)
4. What are the demand schedule and the demand curve and how are they related? Why does the demand curve slope downward? Does a change in consumers' tastes lead to a movement along the demand curve or a shift in the demand curve? (15)
5. Explain the three stages of production with the help of "Law of Variable Proportions". (15)
6. Define total variable cost and total fixed cost. Explain the derivation of short-run marginal cost, average fixed cost and average variable cost curves along with its properties. (15)
7. Explain increasing, decreasing and constant returns to scale? How do they help in explaining optimal plant size? (15)

Total No. of Pages 4

I SEMESTER **BA(H) Economics**

SUPPLIMENTARY EXAMINATION ***Feb 2018***

PAPER CODE BA 102

TITLE OF PAPER Mathematical Methods for Economics I

Time: 3:00 Hours ***Max. Marks: 75***

Note : Attempt any 15 questions. Each quesion carries five marks.
Use of simple calculator is allowed.

Q1 Draw the graph of following equations and solve

a) $x - y = 5$ and $x + y = 1$

b) $x + y = 2$ and $x - 2y = 2$

Q2 Find out the derivative of $f(x) = x^{1/3}$ by using the definition of derivatives.

Q3 Compute the following

a. $\lim_{x \to 2} \frac{x^2 - 2x}{x^3 - 8}$

b. $\lim_{h \to 0} \frac{\sqrt[3]{27+h} - 3}{h}$

Q4 Derive the product rule using the definition of derivatives

Q5 Find the derivatives of following using rules of differentiations

a. $\frac{(x+1)(x-1)}{(x^2+2)(x+3)}$

b. $(3x + 1)\left(\frac{1}{x^2} + \frac{1}{x}\right)$

Q6 The function h is defined for all x>0 by

$$h(x) = \frac{x^p - x^q}{x^p + x^q} \qquad (p > q > 0)$$

Find the first-order Taylor polynomial about x = 1 for $h(x)$

Q7 Prove that if f and g are differentiable functions then following is true:

$EI_x\left(\frac{f}{g}\right) = EI_x f - EI_x g$

Use the above result to calculate the following:

$EI_x\left(\frac{x-1}{x^5+1}\right)$

Q8 Examine the convergence/divergence of the following:

a) $\sum_{n=1}^{\infty} \frac{n}{1+n}$ b) $\sum_{n=1}^{\infty} \frac{1}{(1+1/n)^n}$

Q9 The present discounted value of a payment D growing at a constant rate g

With the discount rate being r is given by

$$\frac{D}{1+r} + \frac{D(1+g)}{(1+r)^2} + \frac{D(1+g)^2}{(1+r)^3} + \ldots\ldots\ldots$$

Where r and g are positive. What is the condition for convergence? Show that if the series converges with sum $P_0 = D/(r-g)$.

Q10 For the following functions, determine the numbers c in the specified intervals such that $f'(c) = \frac{[f(b)-f(a)]}{b-a}$

a. $f(x) = x^2$ in [1,2] b. $f(x) = \sqrt{1-x^2}$ in [0,1]

Q11 Evaluate the following limits:

a. $\lim_{x\to 1} \frac{x-1}{x^2-1}$ b. $\lim_{x\to 1} \frac{x^2+3x-4}{2x^2-2x}$

Q12 Find the inverse of following functions

(i) $f(x) = (1-x^3)^{1/5} + 2$ (ii) $f(x) = \frac{3x-1}{x+4}$

Q13 Find the derivative of following using logarithmic transformation

$y = A\frac{x^p(ax+b)^q}{(cx+d)^r}$

Q14 Solve for x:

$[\ln(x+e)]^3 - [\ln(x+e)^2]^2 = \ln(x+e) - 4$

Q15 An amount Rs 1000 earns interest at 5% per year. What will this amount have grown to after (a) 10 years and (b) 50 years, when interest is compounded (i) yearly (ii) monthly (iii) continuously?

Q16 Find the maximum and minimum of

$$f(x) = 4x^2 - 40x + 80, \qquad x \in [0,8]$$

Draw the graph of f over [0,8]

Q17 Let f be defined by $f(x) = x^3 + \frac{3}{2}x^2 - 6x + 10$

a. Find $f'(x)$ and $f''(x)$
b. Find the stationary points of f and the intervals where f is increasing.
c. Find the inflection points of f and the intervals of concavity/convexity

Q18 Evaluate the following integrals:

a. $\int \left(\sqrt{x\sqrt{x\sqrt{x}}}\right) dx$
b. $\int x(1+x^2)^{15} dx$

Q19 Evaluate the following definite integrals:

a. $\int_1^e \left(\frac{\ln(y)}{y}\right) dy$
b. $\int_0^1 (x^4 - x^9)(x^5 - 1)^{12} dx$

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

First Semester B.A. (Economics)

SUPPLEMENTARY EXAMINATION
(February, 2019)

BA – 103 Environmental Studies

Time: 3:00 Hrs *Max. Marks: 75*

Note: Answer any five (7) questions.
All questions carry equal marks.
Question no. 9 is compulsory.
Assume suitable missing data, if any.

1. What is the difference between extinct and endangered species? Describe different conservation approaches to conserve biodiversity in India. **(10)**

2. Who gave the term ecosystem? Explain in detail about different abiotic components of ecosystem? **(10)**

3. Differentiate between conventional and non-conventional natural resources with suitable examples. **(10)**

4. What is the difference between sound and noise? Mention the noise standards prescribed by CPCB for different zone along with its control measures. **(10)**

5. Write the name of major gases in the atmosphere along with their percentage contribution. What are the major layers of

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the atmosphere? State their respective altitudes, temperature and gases with suitable diagram. (10)

6. What do you mean by greenhouse effect? Name and discuss their contribution to global warming. What can be the effects of global warming along with its remedial measures? (10)

7. What are the environmental impacts of mining? Describe the problems associated with the over-utilization of underground and surface water. (10)

8. "Humans have a special environmental responsibility to themselves and to other fellow living beings". Discuss in detail. Also mention the different reasons behind the reduction of power production in India? (10)

9. Write short notes on any three of the followings: (15)

(a) Sustainable Lifestyle

(b) Chipko Movement

(c) Ecological Pyramids

(d) Lithosphere

(e) Pillars of Food Security

Total No. of Pages 1

I SEMESTER, **B.A. (Eco)**

END-SEM SUPPLEMENTARY EXAM *Feb-2019*

BA-104 FINANCIAL MARKETS & INSTITUTIONS

Time: 3:00 Hours ***Max. Marks: 75***

Note: All questions are compulsory
Q.4. have internal choice
Please keep answers to the point & observe word limit

Q.1 Write short notes on following: (5x4 = 20 Marks)

a. Primary Market

b. Financial Intermediary

c. Mutual Funds

d. Role of RBI as monetary authority (300 words)

Q.2. Outline major functions performed by Commercial Banking in an economy
(900 words) (15 Marks)

Q.3. Describe and explain various types of primary issues in Capital markets
(1200 words) (20 Marks)

Q.4. Indian Financial system as we see today is the result of gradual evolution over the years. Explain various stages of evolution of Indian Financial System.

OR

Outline various components of financial system and briefly explain them.

(20 Marks)

Total No of Pages 2 — 49 — Roll. No.....

~~FIRST~~ SEMESTER — III

B.A. (Hons.) Economics

SUPPLEMENTARY EXAMINATION February 2019

BA201 (Intermediate Microeconomics I)

Time: 03:00 Hours Max. Marks: 75 Marks

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

1.

1.a) Originally the consumer faces the budget line $P_1 X_1 + P_2 X_2 = m$. Then the price of good 1 double, the price of good 2 becomes 8 times larger, and income becomes 4 times larger. Write down an equation for the new budget line in terms of the original prices and income. (5 marks)

1. b) State the assumptions of well-behaved preferences. Can an indifference curve cross itself? (5marks)

1.c) Which of the following are monotonic transformations? (5 marks)

(1.c.1) $u = 2v - 13$

(1.c.2) $u = -1/v^2$

(1.c.3) $U = 1/v^2$

(1.c.4) $u = \ln v$

(1.c.5) $u = v^2$ for $v > 0$

(1.c.6) $u = v^2$ for $v < 0$

2.

2.a) Suppose that indifference curves are described by straight lines with a slope of -b. Given arbitrary prices and money income P_1, P_2, and m, what will the consumer's optimal choices look like? (7.5 marks)

2.b) For Cobb- Douglas utility function $u(X_1, X_2) = X_1^2 X_2^2$, please drive demand functions for budget constraint $P_1 X_1 + P_2 X_2 = m$ (7.5 marks)

3.

3.a) Discuss the two axioms of revealed preference. (5 marks)

3. b) What are Giffen Goods? (5 marks)

3.c) Suppose a consumer has preferences between two goods that are perfect substitutes. Can you change prices in such a way that the entire demand response is due to the income effect? (5 marks)

4.

4.a) If leisure is an inferior good, what can you say about the slope of the labour supply curve? (10 marks)

P.T.O.

4.b) As the interest rate rises, does the intertemporal budget constraint become steeper or flatter? (5 marks)

5.

5.a) What is an isoquant? Please write the equation of following production functions for two inputs Labour (L) and Capital (K):

i) Cobb Douglas
ii) Constant elasticity of substitution
iii) Perfect Substitute
iv) Fixed Proportions (5 marks)

5.b) Derive MP_K, MP_L and RTS for all the above-mentioned production function. (5 marks)

6. What are cost curves? What is the difference between fixed and variable costs? Write the properties of cost function. (15 marks)

7.

7.a) Discuss the types of market structures? For a monopolist discuss AR and MR curves. (5 marks)

7.b) Discuss the profit maximising condition of monopolist with diagram (5 marks)

7.b) Explain Nash equilibrium and prisoner's dilemma. (5 marks)

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

THIRD SEMESTER **B.A (H) ECONOMICS**

SUPPLEMENTARY SEMESTER EXAMINATION **FEB-2019**

BA202 (INTERMEDIATE MACROECONOMICS I)

Time: 03:00 Hours **Max. Marks: 100**

Note : First question is mandatory.
Attempt any four out of remaining five questions.
All questions carry equal marks.

Q1. (a) Consider an economy with: C = 50+0.9Yd, T = 100, G= 10, I = 150 - 5i, L = 0.2Y-10i, Money supply (M^s)= 200, X= 20, Import (IM) = 10+0.1Y and P= 2.

(i) Derive IS and LM equations and find out the equilibrium level of income and equilibrium level of interest rate.

(ii) Suppose G increases by 50. Given this, find out the new equilibrium level of income and new equilibrium level of interest rate.

(iii) Calculate the government expenditure multiplier (α_G) and the fiscal policy multiplier. Tell whether two are different. If yes, then why?

(iv) Is there crowding out of private investment? If yes, then find out the magnitude of income that has been crowded output? (4+2+3+3)

(b) How AD is impacted by each of the following:

(i) Interest sensitivity of investment demand is equal to zero

(ii) An increase in sensitivity of money demand to income (1.5+1.5)

Q2. (a) Assumption of rational expectations renders monetary policy ineffective both in the short run and long-run. Do you agree with the statement? Explain your answer with the help of Lucas aggregate supply curve and aggregate demand curve. (7)

(b) Suppose that the economy can be described by following three equations:

$u_t - u_{t-1} = -0.4(g_{yt} - \bar{g}_y)$ Okun's law

$\pi_t - \pi_{t-1} = -(u_t - 6\%)$ Phillips Curve

$g_{yt} = g_{mt} - \pi_t$ Aggregate Demand

Also it is given that:

Labor force growth rate is 2% and

Labor productivity growth rate is 1%

(i) What is normal rate of growth for this economy?

(ii) Suppose that the unemployment rate is equal to the natural rate, and the inflation rate is 7%. What is the growth rate of output? What is the growth rate of money supply?

(iii) Suppose that conditions are as in (b), when, in year t, the authorities use monetary policy to reduce the inflation to 4% in year t and keep it there. Given this, what must happen to the unemployment rate, rate of growth of output and rate of nominal money growth in year t, $t+1$, $t+2$, $t+3$ and $t+4$? (1+2+5)

Q3. (a) Assume economy is initially working at full employment. Now suppose there is monetary contraction in the economy. Explain how this change would affect the economy both in the short run and medium/long run. You need to explain full dynamics of adjustment (in words and with diagram) and then discuss the neutrality of money in this context. (10)

(b) Suppose that a firm's markup over cost is 10% and Wage-Setting (WS) equation is given by: W=P(1-u).

(i) What is the real wage as implied by Price-Setting equation?

(ii) What is the natural rate of unemployment?

(iii) Suppose that the markup of prices over cost increases to 20%. What happens to the natural rate of unemployment? Explain the economic logic behind your answer. (1+2+2)

Q4. Answer following questions:

(a) Discuss the circumstances in which fiscal policy multiplier is zero

(b) Distinguish between demand side crowding out and supply side crowding out.

(c) What is beggar-thy-neighbor policy?

(d) What is arbitrage theory? How does it affect the exchange rate between two currencies in the two countries?

(e) As per Lucas and Sargent, a fully credible monetary policy changes will break the Phillips curve relation. True or False? Explain (3+3+3+3+3)

Q5. (a) As per uncovered interest parity condition (UIP), an expected change in exchange rate leads to an immediate change in exchange rate by equal percentage. Do you agree with this statement? Explain (5)

In an economy with ... fixed ... agree with this statement? Explain. How will your answer change if it is a fixed exchange rate regime? Explain. (10)

Q6. (a) Using the asset market approach to balance of payment (BOP) under flexible exchange rate, explain how demand of domestic money, domestic bonds and foreign bonds will affected by each of the followings:

(i) Increase in foreign interest rate

(ii) Foreign currency is expected to appreciate.

(iii) Increase in domestic price level.

(iv) Decrease in wealth. (2+2+2+2)

(b) Explain exchange rate overshooting through all the relevant diagrams when central bank unexpectedly increases nominal money supply by 10%, say from 100 billion rupees to 110 billion rupees. (7)

Total No of Pages 01 Roll. No.....

THIRD SEMESTER BA(Eco.)

SUPPLEMENATRY EXAMINATION FEB- 2019

BA206, Investment Management

Time: 03:00 Hours **Max.Marks: 75**

Attempt any five questions. All questions carry equal marks.

1. a) The risk and return of two projects are shown below:

Project	Y	Z
Expected Return	20 %	15 %
Risk	11 %	8 %

An investor plans to invest 70% in project Y and balance in project Z. The correlation coefficient is 0. Find out the risk and return of the portfolio.

b) What is a stock exchange? What are the main functions of stock exchange?

2. a) State the investment decision process. What factors should an investor consider while making investment decisions?

b) Differentiate between Systematic risk and Unsystematic risk. Support your answer with suitable examples.

3. a) What do you understand by Indian financial system? Differentiate between Money market and capital market.

b) Explain any three methods of issue of securities in the primary market.

4. a) **"Fundamental analysis is useful in long-run while technical analysis is useful in short run."** Discuss.

b) Explain the Random walk theory of Market efficiency.

P.T.O

5. a) **"Charting is the basic tool of Technical analysis".** List the different types of price-volume charts and briefly explain any two of them.

b) A company paid dividend of ₹ 3 per share and the face value is ₹ 10. The dividend is expected to grow at 8% per annum. The company belongs to a risk group for which equity capitalisation rate is 14%. What is the intrinsic value of the share?

6. a) Explain the different sources of risk in an investment.

b) A bond of ₹ 1000 bearing a coupon rate of 12% payable half yearly is redeemable after 5 years. Find out the value of the bond if the required rate of return is 14%.

7. a) Calculate Dividend Payout Ratio (DP), Price Earnings Ratio (PE) and Dividend Yield from the following information:

Dividend per share is ₹ 5
Market Price per share is ₹ 30
Earnings per share is ₹ 10

b) Define margin trading? Explain any two types of margins levied in the cash market segment.

END

Total No. of Pages: 6 *Roll No. .....*

THIRD SEMESTER **BA (H) Economics**

SUPPLEMENTARY EXAMINATION ***Feb-2019***

BA 203: STATISTICAL METHODS FOR ECONOMICS

Time: 3:00 Hours *Max. Marks : 75*

Note : 1. This paper contains 4 sections. All the sections are compulsory. Internal choice is given in some sections.
2. All questions within each section are to be answered in a continuous manner on the answer sheet.
3. Use of **simple calculator** is permitted.
4. Required statistical tables are attached with this question paper.

SECTION A

Attempt all the three questions. Each question carries 5 marks.

Q.1 [a] Explain the merits and demerits of geometric mean. [2.5]

[b] Prove that for two numbers $GM^2 = AM*HM$ where GM is the geometric mean, AM arithmetic mean and HM harmonic mean. [2.5]

Q2. Find the Inter-Quartile Range, Quartile Deviation and Coefficient of Quartile Deviation for the following distribution: [5]

Class Intervals	Frequency
0-15	8
15-30	26
30-45	30
45-60	45
60-75	20
75-90	17
90-105	4

Q3. [a] Prove that for two observations a and b, standard deviation is half the distance between them. [2.5]

[b] Consider a society in which half the population earns Rs 100 per day and the other half earns Rs 200 per day. Find the Gini Coefficient of Inequality for this society. [2.5]

SECTION B

Attempt any two questions. Each question carries 10 marks.

Q4. [a] A company has two plants to manufacture scooters. Plant I manufactures 80% of the scooters and Plant II manufactures 20%. At plant I, 85 out of 100 scooters are rated standard quality. At Plant II, only 65 out of 100 scooters are rated standard quality. [5]

(i) What is the probability that a scooter selected at random came from plant I, if it is known that the scooter is of standard quality?

(ii) What is the probability that a scooter selected at random came from plant II, if it is known that the scooter is of standard quality?

[b] Let X and Y be two random variables each taking three values -1, 0 and 1, and having the joint probability as given in the table below:

X→ / Y↓	-1	0	1
-1	0	0.1	0.1
0	0.2	0.2	0.2
1	0	0.1	0.1

Q 12. [a] Prove that the mean of the sampling distribution of the sample means is equal to the population mean i.e. $E(\bar{X}) = \mu$ and variance of the sampling distribution of the sample mean is $V(\bar{X}) = \frac{\sigma 2}{n}$. [5]

[b] Explain why the sampling approach is better than the census approach. Briefly explain the statistical properties of a good estimator. [5]

Obtain the marginal probability distributions of X and Y and hence their expected values. [5]

Q5. [a] You are given the following discrete joint probability function: [5]

$$f(x, y) = k(x^2 + y^2)$$

x = -1, 0, 1, 3 and y = -1, 2, 3

(i) Construct a joint probability distribution table with all probabilities filled in based on the given function.
(ii) For what value of k is f(x, y) a valid joint probability mass function?
(iii) Find the expected value of y.
(iv) Find the variance of y.
(v) What is the conditional distribution of y when x=0?.

[b] Find the mean, variance and cumulative distribution function of a random variable which follows a uniform distribution over the interval [A, B]. [5]

Q6. [a] An insurance company offers its policyholders a number of different premium options. For a randomly selected policyholder, let X = the number of months between successive payments. The cdf of X is as follows: [5]

$$F(x) = \begin{cases} 0, & x < 1 \\ 0.30, & 1 \le x < 3 \\ 0.40, & 3 \le x < 4 \\ 0.45, & 4 \le x < 6 \\ 0.60, & 6 \le x < 12 \\ 1, & 12 \le x \end{cases}$$

a. What is the pmf of X?
b. Using just the cdf, compute P (3 ≤ X ≤ 6) and P (4 ≤ X).

Q.T.O

[b] If X has the probability density

$$f(x) = \begin{cases} e^{-x}, & for\ x > 0 \\ 0, & otherwise \end{cases}$$

Find the expected value of $g(X) = e^{3X/4}$ [5]

SECTION C

Attempt any two questions. Each question carries 10 marks.

Q7. [a] Suppose the probability density function of the magnitude X of a dynamic load on a bridge is given by [1+2+2]

$$f(x) = \begin{cases} \frac{1}{8} + \frac{3}{8}x, & 0 \le x \le 2 \\ 0, & otherwise \end{cases}$$

(i) Find F (x).
(ii) Find the probability that the load is between 1 and 1.5.
(iii) Find the probability that the load exceeds 1.

[b] The yield strength for A36 grade steel is normally distributed with mean = 43 and standard deviation =4.5. [5]

i. What is the probability that yield strength is at most 40? Greater than 60?
ii. What yield strength value separates the strongest 75% from the others?

Q8. [a] Find the mean, variance and cumulative distribution function of a random variable which follows an exponential distribution. [5]

[b] Suppose that 25% of all students at a large public university receive financial aid. Let X be the number of students in a random sample of size 50 who receive the financial aid. Find the approximate probability that

[5]

i. At most 10 students receive the aid
ii. Between 5 and15 of the selected students receive the aid

Q9. [a] Prove that the correlation between two independent random variables is 0. [5]

[b] The joint pdf of two random variables X and Y is given by

$$f(x,y) = \begin{cases} 24xy, & 0 \le x \le 1, 0 \le y \le 1 \text{ and } x + y \le 1 \\ 0, & otherwise \end{cases}$$

Find Cov (X, Y). [5]

SECTION D

Attempt any two questions. Each question carries 10 marks.

Q 10. [a] A sample of trained typists was selected, and the preferred keyboard height was determined for each typist. The resulting sample average preferred height was 80 cm. Assuming that the preferred height is normally distributed with $\sigma = 2$ cm, obtain a 95% confidence interval for μ, i.e. the true average preferred height for the population of all experienced typists. Also, interpret the interval. [5]

[b] A paint manufacturer wants to determine the average drying time of a new interior wall paint. If for 12 test areas of equal size, he obtained a mean drying time of 66.3 minutes and a standard deviation of 8.4 minutes, obtain a 95% confidence interval for μ. [5]

Q11. [a] A researcher wishes to estimate the mean of a population by using a sufficiently large sample. The probability is 0.95 that the sample mean will not differ from the true mean by more than 25% of the standard deviation. How large a sample should be taken? [5]

[b] Prove that sample variance defined by $s^2 = \frac{1}{n-1}\sum(x_i - \bar{x})^2$ is an unbiased estimator of σ^2. [5]

Table entry for p and C is the critical value t^* with probability p lying to its right and probability C lying between $-t^*$ and t^*.

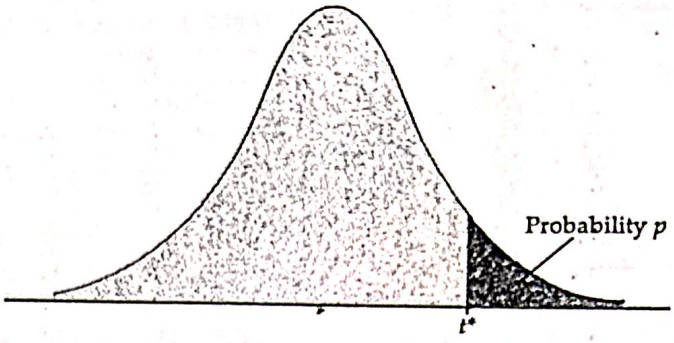

TABLE D

t distribution critical values

	Upper-tail probability p											
df	.25	.20	.15	.10	.05	.025	.02	.01	.005	.0025	.001	.0005
1	1.000	1.376	1.963	3.078	6.314	12.71	15.89	31.82	63.66	127.3	318.3	636.6
2	0.816	1.061	1.386	1.886	2.920	4.303	4.849	6.965	9.925	14.09	22.33	31.60
3	0.765	0.978	1.250	1.638	2.353	3.182	3.482	4.541	5.841	7.453	10.21	12.92
4	0.741	0.941	1.190	1.533	2.132	2.776	2.999	3.747	4.604	5.598	7.173	8.610
5	0.727	0.920	1.156	1.476	2.015	2.571	2.757	3.365	4.032	4.773	5.893	6.869
6	0.718	0.906	1.134	1.440	1.943	2.447	2.612	3.143	3.707	4.317	5.208	5.959
7	0.711	0.896	1.119	1.415	1.895	2.365	2.517	2.998	3.499	4.029	4.785	5.408
8	0.706	0.889	1.108	1.397	1.860	2.306	2.449	2.896	3.355	3.833	4.501	5.041
9	0.703	0.883	1.100	1.383	1.833	2.262	2.398	2.821	3.250	3.690	4.297	4.781
10	0.700	0.879	1.093	1.372	1.812	2.228	2.359	2.764	3.169	3.581	4.144	4.587
11	0.697	0.876	1.088	1.363	1.796	2.201	2.328	2.718	3.106	3.497	4.025	4.437
12	0.695	0.873	1.083	1.356	1.782	2.179	2.303	2.681	3.055	3.428	3.930	4.318
13	0.694	0.870	1.079	1.350	1.771	2.160	2.282	2.650	3.012	3.372	3.852	4.221
14	0.692	0.868	1.076	1.345	1.761	2.145	2.264	2.624	2.977	3.326	3.787	4.140
15	0.691	0.866	1.074	1.341	1.753	2.131	2.249	2.602	2.947	3.286	3.733	4.073
16	0.690	0.865	1.071	1.337	1.746	2.120	2.235	2.583	2.921	3.252	3.686	4.015
17	0.689	0.863	1.069	1.333	1.740	2.110	2.224	2.567	2.898	3.222	3.646	3.965
18	0.688	0.862	1.067	1.330	1.734	2.101	2.214	2.552	2.878	3.197	3.611	3.922
19	0.688	0.861	1.066	1.328	1.729	2.093	2.205	2.539	2.861	3.174	3.579	3.883
20	0.687	0.860	1.064	1.325	1.725	2.086	2.197	2.528	2.845	3.153	3.552	3.850
21	0.686	0.859	1.063	1.323	1.721	2.080	2.189	2.518	2.831	3.135	3.527	3.819
22	0.686	0.858	1.061	1.321	1.717	2.074	2.183	2.508	2.819	3.119	3.505	3.792
23	0.685	0.858	1.060	1.319	1.714	2.069	2.177	2.500	2.807	3.104	3.485	3.768
24	0.685	0.857	1.059	1.318	1.711	2.064	2.172	2.492	2.797	3.091	3.467	3.745
25	0.684	0.856	1.058	1.316	1.708	2.060	2.167	2.485	2.787	3.078	3.450	3.725
26	0.684	0.856	1.058	1.315	1.706	2.056	2.162	2.479	2.779	3.067	3.435	3.707
27	0.684	0.855	1.057	1.314	1.703	2.052	2.158	2.473	2.771	3.057	3.421	3.690
28	0.683	0.855	1.056	1.313	1.701	2.048	2.154	2.467	2.763	3.047	3.408	3.674
29	0.683	0.854	1.055	1.311	1.699	2.045	2.150	2.462	2.756	3.038	3.396	3.659
30	0.683	0.854	1.055	1.310	1.697	2.042	2.147	2.457	2.750	3.030	3.385	3.646
40	0.681	0.851	1.050	1.303	1.684	2.021	2.123	2.423	2.704	2.971	3.307	3.551
50	0.679	0.849	1.047	1.299	1.676	2.009	2.109	2.403	2.678	2.937	3.261	3.496
60	0.679	0.848	1.045	1.296	1.671	2.000	2.099	2.390	2.660	2.915	3.232	3.460
80	0.678	0.846	1.043	1.292	1.664	1.990	2.088	2.374	2.639	2.887	3.195	3.416
100	0.677	0.845	1.042	1.290	1.660	1.984	2.081	2.364	2.626	2.871	3.174	3.390
1000	0.675	0.842	1.037	1.282	1.646	1.962	2.056	2.330	2.581	2.813	3.098	3.300
z^*	0.674	0.841	1.036	1.282	1.645	1.960	2.054	2.326	2.576	2.807	3.091	3.291
	50%	60%	70%	80%	90%	95%	96%	98%	99%	99.5%	99.8%	99.9%
	Confidence level C											

Table A.1 Cumulative Binomial Probabilities *(cont.)*

$B(x; n, p) = \sum_{y=0}^{x} b(y; n, p)$

n = 20

	p														
x	0.01	0.05	0.10	0.20	0.25	0.30	0.40	0.50	0.60	0.70	0.75	0.80	0.90	0.95	0.99
0	.818	.358	.122	.012	.003	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000
1	.983	.736	.392	.069	.024	.008	.001	.000	.000	.000	.000	.000	.000	.000	.000
2	.999	.925	.677	.206	.091	.035	.004	.000	.000	.000	.000	.000	.000	.000	.000
3	1.000	.984	.867	.411	.225	.107	.016	.001	.000	.000	.000	.000	.000	.000	.000
4	1.000	.997	.957	.630	.415	.238	.051	.006	.000	.000	.000	.000	.000	.000	.000
5	1.000	1.000	.989	.804	.617	.416	.126	.021	.002	.000	.000	.000	.000	.000	.000
6	1.000	1.000	.998	.913	.786	.608	.250	.058	.006	.000	.000	.000	.000	.000	.000
7	1.000	1.000	1.000	.968	.898	.772	.416	.132	.021	.001	.000	.000	.000	.000	.000
8	1.000	1.000	1.000	.990	.959	.887	.596	.252	.057	.005	.001	.000	.000	.000	.000
9	1.000	1.000	1.000	.997	.986	.952	.755	.412	.128	.017	.004	.001	.000	.000	.000
10	1.000	1.000	1.000	.999	.996	.983	.872	.588	.245	.048	.014	.003	.000	.000	.000
11	1.000	1.000	1.000	1.000	.999	.995	.943	.748	.404	.113	.041	.010	.000	.000	.000
12	1.000	1.000	1.000	1.000	1.000	.999	.979	.868	.584	.228	.102	.032	.000	.000	.000
13	1.000	1.000	1.000	1.000	1.000	1.000	.994	.942	.750	.392	.214	.087	.002	.000	.000
14	1.000	1.000	1.000	1.000	1.000	1.000	.998	.979	.874	.584	.383	.196	.011	.000	.000
15	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.994	.949	.762	.585	.370	.043	.003	.000
16	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.999	.984	.893	.775	.589	.133	.016	.000
17	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.996	.965	.909	.794	.323	.075	.001
18	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.999	.992	.976	.931	.608	.264	.017
19	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.999	.997	.988	.878	.642	.182

(continued)