

MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS)

(Affiliated to JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD)

Gundlapochampally (H), Maisammaguda (V), Medchal (M), Medchal-Malkajgiri (Dist), Hyderabad.-500 100.

MBA II SEMESTER SUPPLEMENTARY EXAMINATIONS, JULY-2017**SUBJECT: QUANTITATIVE ANALYSIS & DECISION MAKING**

Time: 3 Hours

Max Marks: 75

PART-A

Answer the following Questions

1 X 25 Marks=25 Marks

1. a) Use Big-M Method to solve the following LPP

Maximize $Z = 6x_1 + 4x_2$; Subject to the constraints $2x_1 + 3x_2 \leq 30$; $3x_1 + 2x_2 \leq 24$; $x_1 + x_2 \geq 3$; and $x_1, x_2 \geq 0$

b) Solve the following LP problem.

Minimum $Z = 40x_1 + 24x_2$ STC $20x_1 + 50x_2 \geq 4800$ $80x_1 + 50x_2 \geq 7200$ $x_1, x_2 \leq 0$ **PART-B**

Answer any 5 questions

5 X 10 Marks=50 Marks

1. What are the applications of OR in different managerial areas?

2. a) Explain types of models in OR.

[5M]

b) Define O.R and explain the nature and scope of O.R.

[5M]

3. a) Find IBFS to the following transportation problem by using

i) NWCM ii) LCM

[5M]

Warehouse	Store					Supply
		W1	W2	W3	W4	
F1	32	27	18	41	19	
F2	21	16	25	13	11	
F3	17	18	14	23	13	
Demand	6	10	12	15	43	

b) Define Linear Programming, its assumptions and state the Big-M model.

[5M]

4. Use Graphical method to solve the following LP problem

Minimize $Z = 20x_1 + 10x_2$ Subject to $x_1 + x_2 \leq 40$ $3x_1 + x_2 \leq 30$ $4x_1 + 3x_2 \leq 60$ $x_1, x_2 \leq 0$

5. a) The processing time in hours for the jobs when allocated to the different machines are indicated in the below. Assign the machines for the jobs so that the total processing time is minimum.

Machines					
Jobs/Machines	M1	M2	M3	M4	M5
Job 1	41	28	91	37	45
Job 2	74	42	27	49	39
Job 3	36	11	57	22	25
Job 4	9	22	58	11	19
Job 5	34	78	72	50	63

b) Explain the basic difference between transportation problem and assignment problem. [5M +5M]

6. a) Decision making models under risk. [5M]

b) Define the following: [5M]

Maximum Criterion

Minimum Criterion

Hurwicz Criterion.

7. a) Describe a Single server waiting line model with an appropriate illustration for first come first served, random pick service and customer s stay only if served instantly. [5M]

b) Describe a Single server waiting line model with an appropriate illustration for first come first served, random pick service and customers stay only if served instantly. [5M]

MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS)

(Affiliated to JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD)

Gundlapochampally (H), Maisammaguda (V), Medchal (M), Medchal-Malkajgiri (Dist), Hyderabad.-500 100.

MBA II SEMESTER SUPPLEMENTARY EXAMINATIONS, JULY-2017**SUBJECT: FINANCIAL MANAGEMENT**

Time: 3 Hours

Max Marks: 75

PART – A

Answer the following question

1x25 marks = 25 Marks

1. From the following prepare Income statement of Company A, B

	Company A	Company B
Financial Leverage	4:1	2:1
Interest	300 Rs	1,000 Rs
Operating Leverage	5:1	3:1
Variable cost as a % of sales	75%	50%
Income tax Rate	45%	45%

Answer any 5 questions

5 X 10 Marks=50 Marks

1. In What respect is the objective of wealth maximization superior to the profit maximization.
2. What are the basic financial decisions? How did they involve risk-return trade-off?
3. Calculate (IRR) Internal Rate of Return

Year	0	1	2	3	4
CFAT	11000	6000	2000	1000	5000

4. Explain the Significance of operating and financial leverage analysis for a financial executive in corporate profit and financial structure planning.
5. A Limited company has equity share capital of 25 lakhs divided into 25,000 shares of 100Rs each it wishes to raise further 20 lakhs for expansion the company plans are
 - All common stock
 - 5,00,000 lakhs inequity and 150000 lakhs in 9% debentures
 The company earnings befor interest and tax are 8 lakhs tax rate 40%
 You are required to determine earnings per share in each plan

6. The details regarding 3 companies A ltd, B ltd, C ltd

A ltd	B ltd	C ltd
$r=15\%$	$r=10\%$	$r=5\%$
$K_e=10\%$	$K_e=10\%$	$K_e=10\%$
$E=20Rs$	$E=20Rs$	$E=20Rs$

Calculate:

- The value of an equity share of each of these companies applying Walter's formula
- When dividend payment ratio is 0%, 50%, 75%, 25%. And draw conclusions.

7. Prepare Cash Budget from April to June 2011 Cash at bank on 1st April 25000

Month	Sales	Purchases	Wages
February	180000	124800	12000
March	192000	144000	14000
April	108000	243000	11000
May	174000	246000	10000
June	126000	268000	15000

- 50% of the credit sales are realized in the month following the sales and the remaining sales in second month following.
- Creditors are paid in the following month of purchase
- Wages one month lag

MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS)

(Affiliated to JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD)

Gundlapochampally (H), Maisammaguda (V), Medchal (M), Medchal-Malkajgiri (Dist), Hyderabad.-500 100.

MBA II SEMESTER SUPPLEMENTARY EXAMINATIONS, AUGUST-2017**SUBJECT: MANAGEMENT INFORMATION SYSTEM**

Time: 3 Hours

Max Marks: 75

PART-A**Answer the following Question****1 X 25Marks=25 Marks****CASE STUDY****Consolidating Servers: A wise Move for Mary Kay Inc.?**

Mary Kay Inc. is one of the largest sellers of skincare and cosmetic products in the United States. It manufactures such products as facial skin care, color cosmetics, nail care, body care, sun protection, fragrances, men's skin care and even dietary supplements. In 2001, its global retail sales topped \$2.5 billion. Over 80 percent came via the internet. Its business model is to offer wide choices to its consumers through one to one personalized sales. To fulfill its model, its products are sold by members of its independent sales force of 850,000. They are called independent Beauty Consultants (IBCs) and sell Mary Kay products in 33 countries. The company's focus is "on high touch, personalized service, according to Gregg Jodie, Mary Kay's senior Vice President and CIO.

In 1998 and 1999, Mary Kay was facing increasing competition, from traditional sources such as Avon and from upstart companies that offered direct cosmetic sales to consumers of the internet. The business solution Jodie and others agreed up was that Mary Kay needed a Web site where customers and the personal IBCs could shop directly whenever they chose. Mary Kay wanted a more modern ordering system that would be easier to use. The system had to automatically calculate discovered and detect the customer's eligibility for sales promotions.

Prior to its internet system. Mary Kay had only taken on via telephone or mail, or through their offline desktop and top computers. Mary Kay worked with BEST Systems Inc build an Internet-based e-commerce system called in Touch be used by the IBCs for ordering over the Web. The connect would be easy because using an Internet system meant the I would only need Internet access and a Web browser. The system they built was Microsoft-based, and it was both very reliable initially very scalable.

In Touch delivered many benefits. Being an internet system, it had 24 hour availability. IBCs and customers working with them could view and browse Mary Kay's up to date product catalogue and even access information on the current inventory. Current promotional information was always available and each IBC could create a personalized sales web site. Customers and IBCs could check the order status for all orders, whether they had been entered through the internet or via one of the older methods. As products were ordered, the system checked and immediately reserved the products or informed the IBC that it was out of stock and placed a back order if the customer desired. The system immediately calculated and displayed the final cost including any cost reduction and enabled customers to pay using their credit cards.

Within two years, the system was supporting 125,000 personal web sites. Mary Kay initially used four servers to handle the web orders, but kept adding more servers to keep up with its mushrooming internet business. At end of two years (December 2001), the company had 30 servers supporting its web site. The company upgraded the system to run over windows 2000 advanced server as its operating system, resulting in huge performance and stability improvements. Mary Kay also developed a script used to install new servers in just a few hours and used windows 2000 to manage the servers remotely.

Despite its successes, the distributed web order entry system was having problems. First, Mary Kay still had four separate order entry systems – web, telephone, mail and desktop computers and they

needed to be unified. Moreover, the order entry clerk job for telephone and mail sales was too complex and so it resulted in many errors. Mary Kay had different business rules for some location and they needed to be centralized. Finally, although the system had been very scalable, the company's business was still growing and soon it needed to be able to handle many more orders daily. By late December 2001 the system was processing as many as 25,000 orders in one day and by spring of 2002 it had climbed to 30,000 internet orders in some days. The high number of daily orders came to the end of the month. Most orders during any day were entered at end of the day, spiking loads on the system within a short period of time. Each order consisted of up to 50 separate transactions. On heavy order days the system was handling over 1.2 million transactions daily.

According to Jodie, adding more servers would no longer work because the storage and network management requirements of additional servers were becoming too unwieldy, and additional servers also required too much physical space. Mary Kay's home-grown supply chain software running on Compaq alpha servers could not keep up with the growing load. More distributed hardware clearly would not solve these problems created by Mary Kay's growth. Instead Jodie, with management support decided to move from the firm's current decentralized network system to centralized system on a mainframe. The company then installed a Unisys Enterprise server ES7000 mainframe with 32 Intel processors to run the whole system. Mary Kay was able to partition the Unisys mainframe with its 32 processors into multiple "virtual servers" which could be run separately. Yet they all share the ES7000's storage and networking resources. Galen Schreck, an enterprise infrastructure analyst at Forrester Research, explained. "The real question is where it fits in versus racks full of smaller servers". Moreover, he explained, "A lot of data centers rely heavily on scripts and batch operations", and so the processes can't be broken up to run multiple tasks at the same time. The ES7000 was the first mainframe server hardware that was designed specifically for the MS windows 2000 operating system, and Jodie wanted to stay with Microsoft because he believed it would be too difficult to move from windows while also switching from servers to a mainframe.

Mary Kay subsequently added three more ES7000s so it could easily manage further expansion. It used two of them for its supply-chain system, one world, which it purchased from J.D Edwards. One world had been developed working with Microsoft and Unisys and Jodie said "we felt like there wasn't too much risk because of the level of work they {Unisys Microsoft and J.D Edwards} were doing together".

The company started the conversion on June 10, 2002 and has already found that it takes the 'IBCs 50 percent less time to enter orders than previously. The system will also enable Mary Kay to more easily manage the online operations as its sales continued to multiply.

Sources: Sean Gallagher, "Mary Kay" trims servers, taps windows mainframe". *Baseline Magazine*, July 2, 2002; "Ross System helps Mary Kay, Inc get Beautiful Global Results".

July 16, 2002; Unisys corporation, "Mary Kay" gets I.T. makeover from Unisys with four ES 7000 servers and windows 2000 datacenter server", June 10, 2002; Microsoft case study, "Mary Kay centralizes order entry with Microsoft .NET www.microsoft.com, April 2, 2002; Microsoft case study, "Mary Kay InTouch community scales out and up with windows 2000 to accommodate 1800 percent increase in outline orders over two-year period". www.microsoft.com, December 27, 2001.

CASE STUDY QUESTIONS:

1. Describe Mary Kay's business strategy before 1998. Did its strategy change? Explain your answer.
2. How did information technology fit in with and support Mary Kay's pre-1998 strategy? Why did Mary Kay change the role for information technology in 1998?
3. Why did Mary Kay choose a distributed network approach for handling its growing orders? What were its main strengths?
4. Why did the company abandon its distributed network approach for order entry when it had been successful?
5. Identify and describe the business as well as the technology issues that Mary Kay had to address when consolidating servers.

PART-B

Answer any 5 questions

5 X 10 Marks=50 Marks

1. Define the terms information, system. Also explain about different types of information useful for an organization.
2. What are the functions of an information system from a business perspective, what role do they play in business information value chain? And discuss the major information systems that provide competitive advantage.
3. Explain in detail about Knowledge Management Systems.
4. Explain the structure of management information system on the basis of operating elements of an operating systems and brief up on the relationship between TPS, Office systems, KMS, MIS, DSS and ESS.
5. What is the relationship between the network revolution, the digital firm, electronic commerce and business and brief on information system planning?
6. "System analysis is the analysis of a problem that the organization will try to solve with an information system" justify the statement with an illustration and brief on structure analysis tools of an information systems.
7. Define cyber crime? Write a note on evaluation of cyber crime in global perspective.

Code No.: 3B112

MR 13

MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS)

(Affiliated to JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD)

Gundlapochampally (H), Maisammaguda (V), Medchal (M), Medchal-Malkajiri (Dist), Hyderabad.-500 100.

MBA II SEMESTER SUPPLEMENTARY EXAMINATIONS, AUGUST-2017

SUBJECT: : MARKETING MANAGEMENT

Time: 3 Hours

Max Marks: 75

PART-A

Answer the following Question

1 X 25 Marks=25 Marks

1. a. The marketing manager and product manager had been discussing about need for test marketing the product to get the feedback about a new product toilet soap. Company made unique promise of pure soap made from pure vegetable oils. Product manager suggested that Warangal and Bangalore could be selected as test towns. Warangal being a market which is likely to respond this unique benefit of purity and Bangalore representing cosmopolitan population. It was decided to test the product for a period of 12 to 24 weeks. Product manager decided to give recommendations on extension of the product nationally, based on the preference in test markets. Marketing manager thought that it would be appropriate to use the sales of its existing brand as bench mark. Vice president of sales decided to arrange for market survey among customers after 2 weeks of introduction.

Questions for discussion:

- a. Suggest a suitable research design to evaluate the test market reaction?
- b. What type of information are required to develop a rough questionnaire?
- b. Provide a detailed note on new product development process with an appropriate illustration.

PART-B

Answer any 5 questions

5 X 8 Marks=40 Marks

1. What do you understand by marketing management, its concepts and describe the elements of a company's marketing environment and why marketers play a critical role in tracking environmental trends and spotting opportunities?
2. Explain the stages of the consumer buyer decision process and describe how you or your family went through this process to make a recent purchase.
3. Describe the four major steps in designing a customer driven marketing strategy and describe the four major sets of variables that might be used in segmenting consumer markets.
4. Describe the key functions performed by marketing channel members and state the three strategies available (channel levels) regarding the number of intermediaries with the types of products for which each is appropriate.
5. What factors must marketers consider when setting prices? And discuss the pricing strategies with appropriate illustrations.
6. How do consumers respond to various marketing efforts the company might use? Which buyer characteristics that affect buyer behavior influence you most when making a clothing purchase decision? Are these the same characteristics that would influence you when making a computer purchase?
7. Answer the following:
 - a) Brief on PLC with an illustration
 - b) Brief on communication / promotional mix elements and their suitability for different products.

Code No.: 3B113

MR 13

MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS)

(Affiliated to JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD)

Gundlapochampally (H), Maisammaguda (V), Medchal (M), Medchal-Malkajiri (Dist), Hyderabad.-500 100.

MBA II SEMESTER SUPPLEMENTARY EXAMINATIONS, AUGUST-2017

SUBJECT: : BUSINESS ETHICS & CORPORATE GOVERNANCE

Time: 3 Hours

Max Marks: 75

PART-A

Answer the following Question

1 X 25 Marks=25 Marks

The Ethical Dilemma: Case Study

Raghunath is running a small shop in a small town is content with earning his frugal living. He is religious in outlook and compassionate towards others. One afternoon, when it was raining, an old man, a poor vendor of herbs named Satyadas comes to his shop. He is running a high temperature. Raghunath provides food and shelter. In the morning, the visitor is again provided the hospitality. He then leaves for another destination leaving behind a pouch containing six gold coins and a ring studded with gems. Raghunath waits for him for several months to return and then on the persuasion of his wife Jamuna, he sells the contents of the pouch one by one, sets up a bigger shop, and builds a comfortable house for himself to live in, he starts his life with dignity in the society. But one fine day, suddenly Satyadas makes his appearance. Raghunath is shocked. He is not as hospitable as before. On the contrary, he thinks as if a devil has turned up and wishes he leaves quickly. As Satyadas is about to leave conscientious Raghunath asks "did you leave behind something here when you visited last time? Satya das says "I don't know, God knows everything".

1. In your opinion, Raghunath was with deep sense of guilt and remorse? If so, how and why?
2. Do you find the three imaginary characters are created for conflicting aspects of single mind? Morality, Guilt and Greed. Discuss these three characters based on your thinking.
3. Why could Raghunath not have the moral courage to practice transparency and tell Satyadas: "On your previous visit you left behind some gold coins and a ring. I waited a long time for you to return. Only then I sold them to invest in my business and in building a house. I want to repay you. Let us work out a repayment schedule Comment.

PART-B

Answer any 5 questions

5 X 10 Marks=50 Marks

1. Substantiate the statement "can business ethics be taught and trained".
2. Explain the term Professional ethics and write a note on the practice of ethics in any of the two functional areas.
3. Describe in detail about Cyber Crimes and Cyber Terrorism.
4. What is corporate governance and describe its importance in today's world.
5. Write about the importance of information communication and disclosure in corporate governance.
6. Define the term Business ethics and what are the five myths of business ethics?
7. Is there any relation between ethical dilemma and the mounting scandals in the present times?
8. Write a note on the ethical dimensions of cyber crimes.

