

May/June 2019

Roll No.

Total No. of Pages : 04

Total No. of Questions : 15

MBA (2015 to 2017) (Sem.-3)
APPLIED OPERATIONS RESEARCH

Subject Code : MBA-301

M.Code : 70735

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A contains SIX questions carrying FIVE marks each and students has to attempt any FOUR questions.
2. SECTION-B consists of FOUR Subsections : Units-I, II, III & IV. Each Subsection contains TWO questions each carrying EIGHT marks each and student has to attempt any ONE question from each Subsection.
3. SECTION-C is COMPULSORY and consist of ONE Case Study carrying EIGHT marks.

SECTION-A

- Q1. Define Operations Research.
- Q2. Discuss decision making under certainty.
- Q3. Discuss applications of Linear Programming.
- Q4. What is the basic feasible solution in Linear Programming?
- Q5. Define Game Theory.
- Q6. Define Queuing Theory.

SECTION-B

UNIT-I

- Q7. What is Project Management? Discuss its managerial applications.

- Q8. A book binder has one printing press, one binding machine and manuscripts of 7 different books. The time required for performing printing and binding operations for different books are shown below :

Book	1	2	3	4	5	6	7
Printing time (hours)	20	0	80	20	120	15	65
Binding time (hours)	25	60	75	30	90	35	50

Decide the optimum sequence of processing of books in order to minimize the total time required to bring out all books.

UNIT-II

- Q9. Use Simplex Method to solve the following L.P.P.:

Max. $Z = 4X_1 + 10X_2$ Subject to the constraints :

$$2X_1 + X_2 \leq 50, \quad 2X_1 + 5X_2 \leq 100, \quad 2X_1 + 3X_2 \leq 90, \quad X_1 \geq 0 \text{ and } X_2 \geq 0$$

- Q10. What is duality ? Write dual of the following problem :

Mini. $z = 3X_1 - 2X_2 + 4X_3$ Subject to the constraints;

$$3X_1 + 5X_2 + 4X_3 \geq 7, \quad 6X_1 + X_2 + 3X_3 \geq 4, \quad 7X_1 - 2X_2 - X_3 \leq 10,$$

$$X_1 - 2X_2 + 5X_3 \geq 3, \quad 4X_1 + 7X_2 - 2X_3 \geq 2$$

Where X_1, X_2 and $X_3 \geq 0$

UNIT-III

- Q11. Solve the following game using Game theory:

		Player B	
		B ₁	B ₂
Player A	A ₁	9	2
	A ₂	8	6
	A ₃	6	4

- Q12. Determine the optimal sequence of jobs that minimizes the total elapsed time based on the following information processing time on machines is given in hours and passing out is not allowed :

Job	A	B	C	D	E	F	G
Machine 1	3	8	7	4	9	8	7
Machine 2	4	3	2	5	1	4	3
Machine 3	6	7	5	11	5	6	12



UNIT-IV

- Q13. Discuss the role of Replacement Models in solving managerial problems.
- Q14. In a railway marshalling yard, goods trains arrive at a rate of 30 trains per day. Assuming that the inter-arrival time follows exponential distribution and service time distribution is also exponential with an average 36 minutes. Calculate the following :

- The mean queue size (line length), and
- The probability that the queue size exceeds 10.

If the input of trains increases to an average 33 per day, what will be the change in (i) and (ii)

SECTION-C

- Q15. Solve the following case :

State Electricity Board

The state electricity board is planning to construct a new plant for the next 10 years. It is possible to construct four types of electric power facilities-steam plants using coal for energy, hydroelectric plants with no reservoir, hydroelectric plants with small reservoirs (enough water storage capacity to meet daily fluctuations in power demands and water flow), and hydroelectric plants with large reservoirs (with enough water storage to meet seasonal fluctuations in power demand and water flow).

The consumption of electricity is based on three characteristics. The first is the total annual usage-the requirement in the area is estimated to be 4,000 million kilowatt-hours by the 10th year. The second characteristic is the peak usage of power-usually on a hot summer day at about 2 PM. Any plan should provide enough peaking capacity to meet a projected peak need of 3,000 million kilowatts in the 10th year. The third characteristics is guaranteed power output measured as the averaged daylight output in midwinter when the consumption is high and water levels for the hydroelectric power are low. The 10-year requirement for the 2,000 million kilowatts of guaranteed power.

The various possible power plants vary in terms of how they satisfy characteristics. For example, hydroelectric plants with reservoirs are able to provide substantial peaking capacity, whereas steam plants and hydroelectric plants with no reservoir are poor in this respect.

The characteristics of the various types of the plants are shown in Table below. Each is measured in terms of a unit of capacity. The unit of capacity is defined as to be the capacity to produce 1 billion kilowatt-hours per year. Note that the types of plants vary substantially in their investment costs. The annual operating costs of the various types of

plants also vary considerably. For example, the cost of coal makes the annual costs of the steam plants quite high, whereas the annual costs of operating the hydroelectric plants are relatively less. The final column in the table shows the discounted total costs, including both the investments costs and discounted annual operating costs.

Table : Characteristics of electric plants per unit (1 billion kilowatt-hours) of Annual output

Type	Guaranteed output (millions of kilowatts)	Peak output (millions of kilowatt)	Investment costs (Rs '000)	Discounted Total Cost (Rs '000)
Steam	0.15	0.20	1200	2600
Hydroelectric: No reservoir	0.10	0.10	1600	1680
Hydroelectric: Small reservoir	0.10	0.40	2400	2560
Hydroelectric: Large reservoir	0.80	0.90	4000	4400

Answer the following questions :

- Help the company in developing a 10-year plan that would detail the capacity of each type that it should built.
- Develop an LP model and solve it to minimize the total discounted cost. However, there is a restriction that no more than Rs. 14,000 million can be used for investment in plants over 10 years.

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May June 2019

Roll No.

Total No. of Pages : 03

Total No. of Questions : 15

MBA (2015 to 2017) (Sem.-3)

CONSUMER BEHAVIOUR

Subject Code : MBA-901

M.Code : 70739

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A contains SIX questions carrying FIVE marks each and students has to attempt any FOUR questions.
2. SECTION-B consists of FOUR Subsections : Units-I, II, III & IV. Each Subsection contains TWO questions each carrying EIGHT marks each and student has to attempt any ONE question from each Subsection.
3. SECTION-C is COMPULSORY and consist of ONE Case Study carrying EIGHT marks.

SECTION-A

1. Comparison between differentiated and undifferentiated marketing.
2. Discuss in brief the scope of consumer behaviour.
3. Write a detailed note on "Imagery in consumer behaviour."
4. Discuss briefly the various types of needs.
5. Who are opinion leaders and why do they matter?
6. Discuss the functions of family.

SECTION-B

UNIT-I

7. Explain the concept of research with regard to consumer behaviour? Also explain the scope and application of research in consumer behaviour.

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8. "The importance of knowing and understanding consumer behaviour in modern marketing is vital". Elucidate this statement.

UNIT-II

9. Define consumer learning. Explain in detail the behavioural theories of consumer learning.
10. Write detailed notes on :
 - a) Elements of perception
 - b) Multi attribute and cognitive dissonance

UNIT-III

11. "A society can have all of the values it wants, but if it does not have a way to enforce those values, then having values means nothing." Comment and discuss the affect of values and norms on consumer behaviour.
12. Explain the term "Social Class". Discuss the measurement techniques that give a fair approximation of social class.

UNIT-IV

13. "Marketers are aware of the power opinion leadership exerts on consumers and they deliberately attempt to stimulate opinion leadership." Comment on this statement by bringing out the firm's promotional strategy with regard to opinion leadership.
14. Explain in detail the stages involved in the adoption process.

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SECTION-C

15. Read the Case study and answer the following questions :

Marketers are now working to harness the new-found communications power of their everyday customers by turning them into influential brand ambassadors. Companies like Sony, Microsoft and McDonald's are now developing a new breed of brand ambassador programs that organize and multiply consumer to consumer interactions about their brands. Marketers select their brand ambassadors very carefully, based on customers' devotion to brand and the size of their social circles. For the ambassador, rewards include product samples, gifts discounts and token cash payments. Perhaps most important to many brand enthusiasts, they get inside access to company's information about new product and services about to be launched. One such success story was Sony. Sony used brand ambassadors to jumpstart the launch of its new GPS camera, a high tech device that draws on satellite tracking technology to let you record the exact location of every picture you take and later map them out using Google maps. Out of 2000 or more online applicants, Sony picked only 25 brand ambassadors. The ambassadors were given a free camera and other equipment along with lesson on how to use them. They were encouraged to show the camera to friends, associates, and anyone else who asked handout discount coupons and blog weekly about their travel and picture taking adventures on a dedicated Sony micro site.

QUESTIONS :

- Based on your own understanding of reference groups, how effective would brand ambassadors be as reference groups for relatively expensive, infrequently bought product and services? How would your answer change if the product in question was detergent or cooking oil?
- In your view, in the Indian marketing context, is the concept of brand ambassadors likely to succeed? Justify your answer.

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May/June 2019

Roll No.

Total No. of Pages : 02

Total No. of Questions : 15

MBA (2015 to 2017) (Sem.-3)
SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

Subject Code : MBA-921

M.Code : 70744

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A contains SIX questions carrying FIVE marks each and students has to attempt any FOUR questions.
2. SECTION-B consists of FOUR Subsections : Units-I, II, III & IV. Each Subsection contains TWO questions each carrying EIGHT marks each and student has to attempt any ONE question from each Subsection.
3. SECTION-C is COMPULSORY and carries EIGHT marks.

SECTION-A

1. What is difference between primary & Secondary market?
2. Compare and contrast blue chips and penny stocks.
3. Write a note on dematerialisation.
4. Discuss the linkages between domestic and global stock markets.
5. Discuss in detail the working of call option.
6. Insider trading.

SECTION B

UNIT-I

7. What is the utility of investments? Write a note on investment principles.
8. Discuss the investment vehicles available to individuals in India. Compare on basis of investment objectives.

UNIT-II

9. Elaborate the concept and use of company analysis. Examine the role of management and independent directors in same.
10. Discuss the concept of price indicators. Elaborate various charting techniques.

UNIT-III

11. Discuss the contribution of behavioural finance to portfolio management and security valuation.
12. What do you mean by portfolio management? Discuss different portfolio revision techniques.

UNIT-IV

13. Discuss the concept of margin call in futures and futures settlement procedure.
14. Elaborate the concept of option strategies. How do we calculate payoffs?

SECTION-C

15. Case Study :

Ms. XYZ has just got employed. He has no immediate plans for a marriage in short run. The income of the couple is 6 lac per annum. She has no savings or fixed assets. Her expenditure is Rs. 150000 per month as she is living with her family.

Questions :

- a) What kind of saving portfolio she should invest in and suggest her an investment portfolio as financial advisor assuming six percent inflation and ten percent annual growth in income and expenditure for next 5 years.
- b) What portfolio size would you aim for her?

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Total No. of Questions : 15

MANAGEMENT OF FINANCIAL SERVICES

M.Code : 70745

Max. Marks : 60

1. SECTION-A contains SIX questions carrying FIVE marks each and students has to attempt any FOUR questions.
2. SECTION-B consists of FOUR Subsections : Units-I, II, III & IV. Each Subsection contains TWO questions each carrying EIGHT marks each and student has to attempt any ONE question from each Subsection.
3. SECTION-C is COMPULSORY and consist of ONE Case Study carrying EIGHT marks.

1. What is Re-materialization?
2. What are AMC's?
3. What is Hire Purchase?
4. What is Securitization?
5. What is Credit Card?
6. What is Credit Rating?

UNIT-I

7. How the Depository system function?
8. What is the role and objectives of SEBI?



UNIT-II

9. Explain the constitution and management of Mutual Funds.
10. Describe some of the credit rating agencies working in India.

UNIT- III

11. What is Leasing? What are the advantages of leasing to Lessor and Lessee?
12. Explain the guidelines for Venture Capital in India.

UNIT- IV

13. What is Factoring? Explain its different types and importance.
14. What is Debt securitisation? What is the process of securitisation?

SECTION-C

15. Case study :

Our monetary system has undergone a sea of change in the past century. If our great grandfathers were to see our lives today, they would not be able to relate to any form of payment. Fiat currency, plastic money, negotiable instruments are all creations of the financial innovation that has taken the world by storm in the past century. Although there is widespread skepticism about the fact that fiat currency has historically always declined to zero in value, it is currently in use all over the world.

However, if critics are to be believed, this innovation might be going too far. There have been some experts that have suggested that the government must adopt a drastic change in the way that we handle our finances. This drastic change is outlawing the use of cash! It may seem bizarre but many countries are already implementing these rules in a big way. If these rules do get implemented, for the first time in monetary history, we may have a society which doesn't use cash! Glimpses of what that would look like are already being seen in some countries. Britain does not accept cash for bus tickets any longer! France has outlawed cash transactions greater than 1000 Euros

In America, possession of even moderately large amounts of money can lead to the money being forfeited.

Discuss the pros and cons of living in a cashless society.

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MBA (2015 to 2017) (Sem.-3)
SOCIAL SECURITY & LABOUR WELFARE
Subject Code : MBA-961
M.Code : 70754

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A contains SIX questions carrying FIVE marks each and students has to attempt any FOUR questions.
2. SECTION-B consists of FOUR Subsections : Units-I, II, III & IV. Each Subsection contains TWO questions each carrying EIGHT marks each and student has to attempt any ONE question from each Subsection.
3. SECTION-C is COMPULSORY and consists of ONE Case Study carrying EIGHT marks.

SECTION-A

- Q1. Define the features of Payment of Wages Act, 1936.
- Q2. What are the implications of Maternity Benefit Act, 1961?
- Q3. What is provident fund?
- Q4. What is collective bargaining?
- Q5. Discuss the role of ILO.
- Q6. Why do employees join unions?

SECTION-B

UNIT-I

- Q7. What do you mean by social security? Discuss its scope.
- Q8. Write notes on :
 - a. Social insurance
 - b. Evolution of social security

UNIT-II

- Q9. Discuss the scope and importance of Minimum Wages Act, 1948.
- Q10. Discuss the features and implications of Workman's Compensation Act, 1923.

UNIT-III

- Q11. What are the provisions of Gratuity Act, 1972?
- Q12. Discuss the features of Employment State Insurance act, 1948.

UNIT-IV

- Q13. What are the various agencies for administering labor welfare laws in India? Also discuss their role.
- Q14. Define the term labour welfare. Bring out the various types of welfare.

SECTION-C

Q15. Case study :

"WHOSE SIDE ARE YOU ON, ANYWAY?"

It was past 4pm and Purshottam Kshirsagar was still at this shopfloor office. The small but elegant office was a perk he was entitled to after he had been nominated to the board of Horizon industries (P) Ltd. as workman-director six months ago. His shift generally ended at 3pm and he would be home by late evening. But that day, he still had long ahead of him.

Kshirsagar had been with Horizon for over twenty years. Starting off as a substitute mill-hand in the paint shop at one of the company's manufacturing facilities, he had been made permanent on the job five years later. He had no formal education. He felt this was a handicap, but he made up for it with a willingness to learn and a certain enthusiasm on the job. He was soon marked by the works manager as someone to watch out for. Simultaneously, Kshirsagar also came to the attention of the president of the Horizon Employees' Union who drafted him into union activities.

Even while he got promoted twice during the period to become the head colour mixer last year, Kshirsagar had gradually moved up the union hierarchy and had been thrice elected secretary of the union.

Labour-management relations at horizon were not always cordial. This was largely because the company had not been recording a consistently good performance. There were frequent cuts in production every year because of go-slows and strikes by workmen- most of them related to wage hikes and bonus payments.

With a view to ensuring a better understanding on the part of labour, the problems of company management, the Horizon board, led by chairman and managing director Avinash Chaturvedi, began to toy with the idea of taking on a working on a workman on the board. What started off as a hesitant move snowballed, after a series of brainstorming



sessions with executives and meetings with the union leaders, into a situation in which Kshirsagar found himself catapulted to the horizon board as workman-director.

I was an untested ground for the company. But the novelty of it all excited both the management and the labour force. The board members-all functional heads went out of their way to make Kshirsagar comfortable and the latter also responded quite well. He got used to the ambience of the boardroom and the sense of power it conveyed. Significantly, he was soon at home with the perspectives of top management and began to see each issue from both sides.

It was smooth going until the union presented a week before the monthly board meeting its charter of demands, one of which was a 30 per cent across-the-board hike in wages. The matter was taken up at the board meeting as part of a special agenda.

"Look at what your people are asking for", said Chaturvedi, addressing Kshirsagar with a sarcasm that no one in the board missed. "You know the precarious finances of the company. How could you be a party to a demand that simply can't be met? You better explain to them how ridiculous the demands are", he said.

"I don't think they all can be dismissed as ridiculous", said Kshirsagar. "And the board can surely consider the alternatives. We owe at least that much to the union". But Chaturvedi adjourned the meeting in a huff, mentioning once again to Kshirsagar that he should "advise the union properly".

When Kshirsagar told the executive committee members of the union that the board was simply not prepared to even consider the demands, he immediately sensed the hostility in the room. "You are a sell out", one of them said. "Who do you really represent - us or them?" asked another.

"Here comes the crunch", thought Kshirsagar. And however hard he tried to explain, he felt he was talking to the wall.

A victim of divided loyalties, he himself was unable to understand whose side he was on. Perhaps the best course would be to resign from the board. Perhaps he should resign both from the board and the union. Or may be resign from Horizon itself and seek a job elsewhere. But, he felt, sitting in his office a little later, "none of it could solve the problem".

Question :

- a. What should he do?
- b. What are the lessons in this case?

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Roll No.

Total No. of Pages : 02

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MBA (2015 to 2017) (Sem.-3)
TRAINING AND DEVELOPMENT
Subject Code : MBA-962
M.Code : 70755

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A contains SIX questions carrying FIVE marks each and students has to attempt any FOUR questions.
2. SECTION-B consists of FOUR Subsections : Units-I, II, III & IV. Each Subsection contains TWO questions each, carrying EIGHT marks each and student has to attempt any ONE question from each Subsection.
3. SECTION-C is COMPULSORY and consist of ONE Case Study carrying EIGHT marks.

SECTION-A

Answer the following :

- Q1. What is the difference between training and development?
- Q2. How cost benefit analysis of training is performed?
- Q3. Explain the steps involved in Kirkpatrick model of evaluation.
- Q4. What are the objectives of training and development?
- Q5. What are the benefits of simulation training at workplace?
- Q6. How training leads to effective change in management?

SECTION-B

UNIT-I

- Q7. How training needs are identified? Briefly explain the methods of identifying training needs.
- Q8. Briefly explain the complete process of training and development.

UNIT-II

- Q9. Differentiate between on the job training and off the job training. Also explain which one is better and why?
- Q10. What are the reasons that employees resist for training at work place? Also suggest some steps that can overcome the problem of resistance in training.



UNIT-III

- Q11. What skills/ qualities are required to be an effective trainer? Explain the role of trainer in effective training program.
- Q12. Explain the steps involved in team building process. What are the benefits of team learning and development for the organization?

UNIT-IV

- Q13. What is the process of evaluating the effectiveness of training program? Also explain the problems encountered in this evaluation process.
- Q14. Critically evaluate the CIRO model of training and development evaluation.

SECTION-C

Q15. Mr. Shrikant is a senior manager of a reputed manufacturing Company who is engaged in manufacturing wooden furniture for more than 35 years. He has 25 employees in his department working under him who all are skilled and efficient in their own way. For the past 3 years the market for the company's goods has been steadily growing and the majority of his staff have met by the changing expectations of customers. However one employee in particular, Gopal has not kept up with the pace. Gopal has been with this corporation for over 20 yrs and is now 56 yrs old. He is a friendly man and is liked by all his peers as he keep on motivating them with his positivity and experience. The company has always considered Gopal dependable and loyal. Through the years, he has been counted as an asset to the company, but at the age of 56, he has gone into an age of semi-retirement. Gopal's productivity has been slow down as he is not able to learn and accept new techniques that have become the need of the hour of manufacturing organizations. Shrikant wishes to change this situation. He wants to motivate Gopal by teaching him new manufacturing techniques so that his efficiency matches that of his younger peers. To do this Gopal must begin to do more than just put in his time Unlike the majority of new employees, Gopal is an old man, who within a few years will reach the age of retirement. He tries to convince Gopal but found that he is reluctant to change his behavior.

- As a team leader how would you understand Gopal's position to resist changing?
- How will you identify need of imparting special training to Gopal to match organization's requirement?
- What can be done to fetch Gopal's interest in learning new techniques of designing and manufacturing?
- What type of training technique can be effective for Gopal to increase his efficiency?

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May/June 2019

Roll No.

Total No. of Pages : 02

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MBA (2015 to 2017) (Sem.-3)

PROGRAMMING IN C

Subject Code : MBA-981

M.Code : 70759

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A contains SIX questions carrying FIVE marks each and students has to attempt any FOUR questions.
2. SECTION-B consists of FOUR Subsections : Units-I, II, III & IV. Each Subsection contains TWO questions each carrying EIGHT marks each and student has to attempt any ONE question from each Subsection.
3. SECTION-C is COMPULSORY carrying EIGHT marks.

SECTION-A

- Q1. Explain various data types used in C programming language.
- Q2. Distinguish between function prototype and function definition with the help of an example.
- Q3. Differentiate between Structure and Union with the help of an example.
- Q4. Write a program to find the sum of the first hundred natural numbers.
($1 + 2 + 3 + \dots + 100$).
- Q5. Explain various string manipulation inbuilt functions.
- Q6. Differentiate between break and continue statements.

SECTION-B

UNIT-I

- Q7. Explain various types of operators along with their precedence and associativity.
- Q8. What is a flowchart? Explain it with the help of an example depicting various symbols used in it.

UNIT-II

- Q9. Write a program to generate the pattern of numbers as given under :

5 4 3 2 1

4 3 2 1

3 2 1

2 1

1

- Q10. What are storage classes? Explain in detail various storage classes.

UNIT-III

- Q11. Write a program to compare 2 strings character by character using pointers. Display the similar characters found in both the strings and count the number of dissimilar characters.

- Q12. Explain the various operations that can be performed on Arrays.

UNIT-IV

- Q13. Explain arrays of structures with the help of a suitable example. How are they beneficial to the programmers?

- Q14. Distinguish between the following functions :

a) scanf() and fscanf()

b) getc() and getchar()

c) putc() and fputc()

d) putw() and getw()

SECTION-C

- Q15. Describe the functionalities of a Banking system using structures, functions and files.

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