

Exam.Code:0502

Sub. Code: 3814

2071

Master of Commerce, Second Semester  
MC-202: Research Methodology in Commerce  
(Same for USOL candidates)

Time allowed: 3 Hours

Max. Marks: 80

*NOTE: Attempt five questions in all, selecting atleast one question from each Unit.*

*x-x-x*

**UNIT – I**

- I. Research is concerned with proper fact finding, analysis and evaluation. Do you agree with this statement? Give reasons in support of your answer. (16)
- II. Distinguish between inductive methods and deductive methods. Discuss their merits and demerits. (16)
- III. What do you understand by the term Hypothesis? Discuss the types of hypothesis and significance of hypothesis testing in research? (16)

**UNIT – II**

- IV. Discuss briefly the various techniques of sampling. Give suitable examples to support your view point while explaining each techniques. (16)
- V. Explain the process and significance of collection and organization of material with special emphasis upon correct sources of information. (16)

**UNIT – III**

- VI. Write short notes on the following:-
  - a) Classification and tabulation of data
  - b) Pictorial presentation of data (2x8)
- VII. Discuss in detail the importance of coordinating contents in the presentation of information. How should front matter and backmatter be coordinated? (16)

**UNIT – IV**

- VIII. Define multivariate analysis. What are the objectives of multivariate analysis and explain its importance. (16)

P.T.O.

(2)

- IX. What do you mean by factor analysis? Give suitable examples to highlight the different steps involved in performing factor analysis. Discuss the economic significance to factor analysis. (16)
- X. Explain the significance of a research report and narrate the various steps involved in writing such a report. (16)

x-x-x

2071

Master of Commerce, Second Semester  
MC-203: Financial Management and Policy  
(Same for USOL candidates)

Time allowed: 3 Hours

Max. Marks: 80

**NOTE:** Attempt five questions in all, selecting atleast one question from each Unit.

x-x-x

**UNIT - I**

- I. Explain the meaning of term wealth maximisation? Also explain how wealth maximisation is a superior objective as compared to profit maximisation? (16)
- II. What do you mean by External Funds Requirement? Explain the process of estimation of External Funds Requirement with the help of any hypothetical example of your choice. (16)

**UNIT - II**

- III. What is certainty equivalent approach of capital budgeting? Explain the process of evaluation of projects using certainty equivalent approach using any hypothetical example of your choice. (16)
- IV.
- a) Calculate the after-tax cost of debt, from the following information:-
- 15% Debt having face value Rs. 100 issued for Rs.96
  - Maturity period is 5 Years
  - Redemption Value is Rs. 103
  - Tax Rate is 40%
- b) Calculate the Cost of Equity Capital, from the following information:
- Per Annum Dividend = Rs. 12
  - Market Price of the Share is Rs.100
  - Dividend Expected to grow at a constant rate of 5% p.a. (10+6)

P.T.O.

(2)

**UNIT - III**

- V. Critically evaluate the MM approach to Capital Structure. (16)
- VI. "Financial Leverage is a double-edged sword, whereas it has the potential to increase the return of shareholders on the other hand it increases the risk of equity shareholders". Explain this statement with the help of any example of your choice. (16)
- VII. What is operating leverage? Explain the effect of operating leverage on the risk to shareholders. Also discuss the process of calculation of operating leverage with the help of some example. (16)

**UNIT - IV**

- VIII. Critically evaluate Walter's Dividend Decision Model. (16)
- IX. Discuss the motives of holding cash in a business. Also discuss the various issues associated with management of cash in a business. (16)
- X. "Receivables constitute an important asset in a business and need to be managed in a systematic manner". Elaborate this statement. (16)

Exam.Code:0502

Sub. Code: 3816

2071

Master of Commerce, Second Semester  
MC-204: Production and Material Management  
(Same for USOLCandidates)

Time allowed: 3 Hours

Max. Marks: 80

**NOTE:** Attempt five questions in all, selecting atleast one question from each Unit.

x-x-x

**UNIT – I**

- I. Define production. Why is it called a value addition process? Discuss the functions of production management and its importance in a manufacturing organization. (16)
- II. 'The role of purchasing is now one of supply management'. Comment on this statement and bring about the functions of purchasing and its role in reducing material costs. (16)

**UNIT – II**

- III. Which factors influence the price of an item? How can the right price be determined? (16)
- IV. Compare production management and operations management. Discuss the scope and activities of operations management and its role in the growth of an organization. (16)
- V. Mean and range values of 10 samples, each having 5 observation, are shown below:-

Sample No.	1	2	3	4	5	6	7	8	9	10
Mean	10.4	9.0	10.8	10.2	8.8	9.6	11.4	11.2	11.6	10.2
Range	5	4	3	5	4	3	4	2	3	6

(Construct the mean and range charts. (For  $n=5$ ,  $A_2 = 0.58$ ,  $D_3 = 0$ ,  $D_4 = 2.11$ )

(16)

**UNIT – III**

- VI. Highlight the importance of location decisions for an organization. What are implications of a wrong location decision? Which factors should be considered for deciding the location of (i) an automobile showroom and (ii) a super specialty hospital? (16)

P.T.O.

(2)

VII. How does a good plant layout help in improving productivity? Which are the determinants of plant layout? What is the linkage between type of layout and materials handling. (16)

VIII. Various activities of a project and their durations are shown below:-

Activity	1 - 2	1 - 3	1 - 4	2 - 5	3 - 6	3 - 7	4 - 7	5 - 8	6 - 8	7 - 9	8 - 9
Duration (Days)	8	12	10	9	6	5	13	15	9	10	7

Draw the network, identify the critical path and determine EST, EFT, LST and LFT of each activity.

(16)

#### UNIT - IV

IX. Discuss the need for, prerequisites for and procedure of work study. (16)

X. Write notes on:-

a) Work sampling

b) Synthetic time standards

(2x8)

x-x-x

2071  
Master of Commerce, Second Semester  
MC-205: Operations Research  
(Same for USOL candidates)

Time allowed: 3 Hours

Max. Marks: 80

**NOTE:** Attempt five questions in all, selecting atleast one question from each Unit.

x-x-x

**UNIT – I**

- I. What are the assumptions of linear programming? What do you mean by infeasibility and unboundedness in linear programming? State applications of LPP in business. (16)
- II. Three types of dolls (D1, D2 and D3) manufactured by a toy maker generates a profit of Rs.10, 13 and 11 respectively. Because of the constraints of labour and machine time available only a limited quantity of dolls can be manufactured which was estimated to be 16000 of D1, 25000 of D2 and 12000 of D3. To manufacture such quantity labour time per unit required was calculated to be 0.3, 0.5 and 0.34 minutes whereas machine time was 0.03, 0.045 and 0.03 minutes for dolls D1, D2 and D3 respectively. Maximum labour time and machine time available to fulfill the mentioned demand were 9000 minutes and 11,000 minutes. All the three type of dolls undergo same process for manufacturing. The manager would like to find combination of number of dolls of each type that could be manufactured under given constraints that would maximize profits. (16)
- III. Maximize  $Z = 4x_1 + 4x_2$
- Subject to:  $5x_1 + 10x_2 = 20$   
 $10x_1 + 1x_2 \geq 10$   
 $x_1, x_2 \geq 0$
- a) Construct the dual form.  
b) Solve only primal by simplex method and identify basic solution at each iteration. Also identify complementary dual solution from primal.  
c) Identify basic and non-basic variables of dual problem.  
d) Determine whether primal and dual has a feasible and optimal solution. (16)

(2)

UNIT - II

IV. Consider the given transportation table and:

	D1	D2	D3	D4	Supply
S1	6	8	11	6	100
S2	7	6	9	3	250
S3	7	7	10	8	125
S4	9	6	15	5	150
<i>Demand</i>	150	125	200	150	

- Formulate LPP of given transportation problem.
- Signify the importance of VAM method over least cost method by finding initial feasible solution.
- Find optimal solution of minimum initial cost solution obtained in (a).
- If supply of source S2 is reduced to 200 units because of some production constraint how initial solution changes? Find by using least cost method. (16)

V. Consider the given transportation table and:

	D1	D2	D3	Supply
S1	5	11	7	200
S2	9	17	7	400
S3	15	19	11	400
<i>Demand</i>	300	400	300	

- Use North-West Corner and Least Cost method to find initial solution.
- Find most optimal solution of the minimum initial solution.
- How solution would change if minimum of 200 units have to be routed through S3-D3 route. (16)

VI. Explain the concept of sub-tours and illustrate them by solving following travelling salesman problem:

	A	B	C	D	E
A	$\infty$	6	12	16	4
B	14	$\infty$	8	12	6
C	18	16	$\infty$	10	16
D	26	10	14	$\infty$	12
E	4	8	6	18	$\infty$

(16)



(3)

UNIT - III

- VII. For the following project estimate total project cost under normal times and crash times. Indirect cost is Rs.100 per day.

Activity	Predecessor	Normal		Crash	
		Time (days)	Cost (Rs. 000)	Time (days)	Cost (Rs. 000)
A	—	8	100	6	200
B	—	4	150	2	350
C	A	2	50	1	90
D	A	10	100	5	400
E	B	5	100	1	200
F	C,E	3	80	1	100
		<i>Total</i>	580		

(16)

- VIII. A project has been defined to contain the following activities, along with their time estimates

Activity	Time estimates (week)			Predecessor
	Optimisti	Most likely	Pessimistic	
A	1	4	7	-
B	2	6	7	A
C	3	4	6	A,D
D	6	12	14	A
E	3	6	12	D
F	6	8	16	B,C
G	1	5	6	E,F

- Draw the critical path diagram
- Show the early start, early finish, late start and late finish times.
- What is the probability that the project can be completed in 34 weeks? (16)

UNIT - IV

- IX. A grocery store has a small adjacent parking lot with three parking spaces reserved for the store's customers. During store hours when the lot is not full cars enter the lot and use one of spaces at a mean rate of two per hour. When the lot is full the arriving cars leave and do not return. For  $n=0,1,2,3$  probability that exactly  $n$  spaces currently are being used is 0.2, 0.3, 0.3 and 0.2 respectively.

P.T.O.

(4)

- a) Describe how this parking lot can be interpreted as being a queuing system. In particular, identify the customers and the servers. What is the service being provided? What constitutes a service time? What is the queue capacity?
- b) Determine the basic measures of performance for this queuing system.
- c) Determine the average length of time that a car remains in a parking space.

(16)

X. Explain:

- a) Minimax and Maximin principle used in game theory.
- b) What is a saddle point? Does every game necessarily possess a saddle point?
- c) Solve the following game by using graphical method

		Player - B	
		I	II
Player - A	I	2	7
	II	3	5
	III	11	2

(16)

x-x-x

2071  
Master of Commerce, Second Semester  
MC-206: Business Policy and Strategic Management  
(Same for USOL candidates)

Time allowed: 3 Hours

Max. Marks: 80

*NOTE: Attempt five questions in all, selecting atleast one question from each Unit.*

*x-x-x*

**UNIT - I**

- I. "Business policies are very much the base of Management process". Explain. (16)
- II. Define Strategy. Explain Mintzerbg's 5Ps of strategy. (16)
- III. What are implications and limitations of Strategic Management Process? (16)

**UNIT - II**

- IV. What is Turnaround strategy? What is the approach to turnaround strategy? (16)
- V. Highlight the strategies for promoting ethical climate in an organisation. (16)
- VI. What is Integration? What are its types? (16)

**UNIT - III**

- VII. What is 7S model? How it helps in reducing difficulties in strategic implementation. (16)
- VIII. What are the barriers to strategic evaluation and control? How can it be overcome? (16)

**UNIT - IV**

- IX. Discuss the pitfalls in the way of Ecommerce in India. (16)
- X. CASE STUDY  
Tasty spices Ltd, the countries' biggest spices marketer has decided to launch a hostile bid for France's major spice marketer Tastiano Limited. This is a rare case of an Indian company making an unsolicited hostile bid for a foreign company. The Tasty Spices Ltd. has competencies in Indian spices. The major destination markets for the Tasty spices Ltd. exports have been the Europe and America.

Contd.....P/2

(2)

The competencies of Tastianio lie in Italian herbs and spices. The Indian company with the takeover wishes to synergies its operations in the world market. It also wants to take advantage of the reach enjoyed by the Italian company in several countries where its products are not being sold presently. The move of hostile takeover follows Tastianio's rejection to an agreement entered a year back. At that time Tastianio was suffering losses and it offered majority shares at a price of Rs 125. A total of 20% shares were transferred at that time. In one year Tastianio was able to turn around its operations and the company made handsome profits in the last quarter. The promoters who have residual holding of 35% in the company are reluctant to transfer the shares now. They have rejected the agreement with a plea that the earlier offer price was not sufficient. Tasty spices Ltd has revised its offer to Rs 195. By this lucrative offer some of the large shareholders of Tastianio reveal their interest for selling their stakes. On the other hand, promoters maintained their position on this matter. Through the process of buying of shares in the market the Tasty spices Ltd. gradually consolidated its holding in Tastianio to 45%. Being a major shareholder they were ready for a takeover. At the same time. Tasty spices Ltd. was trying hard to improve their position so that they do not leave any space for Tastianio's promoters in future. Read the above case and answer the following questions:

- a) What strategic alternative is followed by Tasty spices Ltd?
- b) Is the hostile takeover by an Indian company appropriate?
- c) Why the Tasty Spices Ltd. is interested in this takeover?
- d) Why the promoters are reluctant to transfer the shares after the agreement?

(16)

*x-x-x*