

**Sacred Heart College (Autonomous)**

**Department of Commerce**

**Master of Commerce [Finance and Taxation]**

**Course plan**

**Academic Year: 2015 - 16**

**Semester II**

**Department of Commerce**  
**Course Plan: Advanced Financial Accounting**

Course Code	P1COMT06
Title of the course	ADVANCED FINANCIAL ACCOUNTING II
Number of credits	4
Semester	2
Number of contact hours	72
Course Teacher	Prof. Johnson John

**REFERENCE BOOKS**

1. Advanced Financial Accounting, M.C.Shukla&T.S.Grewal, S.Chand& Co;
2. Advanced accountancy, Arulanandam& Raman, Himalya Publishing House
3. Fundamentals of Financial accounting, Nasseem Ahmed, Ane books Pvt,
4. Advanced Financial Accounting, R.L.Gupta&Radhaswami, Sultan Chand CO;
5. Advanced Financial Accounting, S.N.Maheswari
6. Advanced Financial Accounting, Paul &Kaur
7. Advanced Financial Accounting, B.D. Agarwal
8. Advanced Financial Accounting, S.P.Jain&K.L.Narang; Kalyani Publishers

	<b>Topic</b>	<b>Method</b>	<b>Remarks</b>
Module 1	Accounts of holding companies, consolidated balance sheet	Discussion	22 Hrs
	Minority interest-cost of control-pre-acquisition and post-acquisition profit	Lecture Problem solving	
	Elimination of common transaction	Group discussion and case studies	
	Elimination of common transaction Advance Problems	Problem solving- Advanced Problems	
	Contingent liabilities	Advanced Problems	
	Unrealised profit-	Advanced Problems	
	Bonus issue -	Advanced Problems	
	Revaluation of assets and liabilities-	Advanced Problems	
	Treatment of dividend-debentures and preference shares of subsidiary companies	Advanced Problems	
Module 2	Accounts of public utility undertakings-double account system	Lecture, Group discussion and case studies	12 Hrs
	Accounts of electricity concerns-	Problem solving Advanced problems	
	computation of reasonable return and clear profit-replacement of asset	Problem Solving- Advanced Problems	
Module 3	Liquidation accounts statement of affairs	Lecture , Discussion	12 Hrs
	deficiency accounts liquidators final statement of accounts.		

	statement of affairs-deficiency accounts-liquidators final statement of accounts	Problems solving-Advanced problems	
Module 4	Accounting for specialized type of business	Discussion, Lecture,	12 Hrs
	Voyage accounts Farm account	Problem Solving-Advanced Problems	
Module 5	Green accounting-meaning-scope and importance-green accounting concepts-advantages and limitations-Artificial intelligence in Accounting-Forensic Accounting	Lecture, Case Studies	10Hrs

## **STRATEGIC MANAGEMENT**

**Professor : Fr Tomy P P**  
**Class: II M.Com**  
**Semester: II**

### **COURSE OBJECTIVE**

1. To understand the frame work across strategic analysis, strategy formulation, and strategic implementation.

### **REFERENCE BOOKS**

1. Text book of strategic management, U.C. Mathur, ,Macmillain India limited.
2. Strategic Management: An Integrated Approach, Hill.
3. Strategic Management, CN.Sontakki, Kalyani Publications
4. Strategic Management: Theory and Practice, Parnell.
5. Fundamentals of Strategic Management, Parthasarthy.
6. Strategic Management, White, Palgrave Macmillian,
7. Strategic Management, Francis Cherunilam, Himalaya Publishing House.
8. JauchLawrance R, Business Policy and strategic Management, MacGraw Hill Co;
9. Sharmma RA, Strategic Management in Indian companies, Deep & Deep co;
10. Philip Sadler, Strategic Management, Kogan Page India.

Sessions	Module	Topic	Method	Remarks
1	I	Introduction		
2	I	concepts of strategy	PPT	
3	I	Basic concept of strategic management	PPT	
4	I	strategic management process	PPT	
5	I	strategic management process	PPT	
6	I	models of strategic management	PPT	
7	I	models of strategic management	PPT	
8	I	approaches to strategic decision making	PPT	
9	I	approaches to strategic decision making	PPT	
10	I	vision	PPT	
11	I	mission	PPT	
12	I	objectives	PPT	
13	I	goals	PPT	
14	I	strategic levels in an organization	PPT	
15	I	SBU	PPT	
16	II	Environmental analysis - Introduction	PPT	
17		concept of environment-	PPT	
18		macro environment	PPT	
19		macro environment	PPT	
20		micro environment	PPT	
21		environmental scanning	PPT	
22		models for environmental analysis	PPT	
23		models for environmental analysis	PPT	

24		value chain analysis	PPT	
25		SWOT analysis	PPT	
26		SWOT analysis	PPT	
27		BCG matrix	PPT	
28		GE's spot light matrix	PPT	
29		Tows Matrix	PPT	
30		First Internal Examination		
31	III	Strategic Planning and formulation - Introduction	PPT	
32		stages of strategic planning	PPT	
33		strategic alternatives	PPT	
34		types of strategies	PPT	
35		types of strategies	PPT	
36		growth strategies	PPT	
37		dependency and reduction strategies	PPT	
38		horizontal and vertical integration	PPT	
39		backward and forward integration	PPT	
40		diversification and defensive strategies	PPT	
41		generic strategies	PPT	
42		grand strategies	PPT	
43		portfolio strategies	PPT	
44		turn around strategies.	PPT	
45	IV	Organizational level strategies	PPT	
46		capacity expansion	PPT	

47		mergers	PPT	
48		joint ventures	PPT	
49		acquisition	PPT	
50		takeovers	PPT	
51		Consortia	PPT	
52		networking	PPT	
53		franchising	PPT	
54		licensing	PPT	
55		sub contacting	PPT	
56		concentric diversification & conglomerate diversification	PPT	
57		7 S framework	PPT	
58		competitive analysis and strategies	PPT	
59		Second Internal Examination		
60	<b>V</b>	Strategy implementation	PPT	
61		evaluation and control	PPT	
62		various approaches to implementation of strategy	PPT	
63		strategic choice	PPT	
64		strategy and structure	PPT	
65		strategic control process	PPT	
66		operational control	PPT	
67		performance gap analysis	PPT	
68		models and tools of control	PPT	
69		Future of strategic management.	PPT	
70		REVISION	Discussion	



71		REVISION	Discussion	
72		EVALUATION	Discussion	

**COURSE PLAN**  
**FINANCIAL MANAGEMENT STRATEGIES- COURSE CODE: 16P2COMT08**  
**SECOND SEMESTER M.COM**

**TEACHING FACULTY: Tessa Mary Jose**

**CREDIT: 4**  
**HOURS : 60**

**OBJECTIVES:**

- **To acquaint students with the short term investment decisions and the theories and policies related to the same**
- **To help students to give suggestions for liquidity problems and thereby assist in proper working capital management**

**REFERENCE:**

1. Contemporary Financial Management, Rajesh Kothari, Macmillain India Limited
2. Financial Management, P.V.Kulkarni, Himalaya Publishing House
3. Financial Management, Srivastava, Himalaya Publishing House
4. Fundamentals of Financial Management, Preeti Singh, Ane Books Private Limited
5. Financial Management, Dhagat, Kogent
6. Financial Management, Shah
7. Financial Management, Knott, Palgrave Macmillian
8. Financial Management, S.N.Maheshwari, Sultan Chand Co
9. Financial Management, Van Horn, James .C., Prentice Hall India, Limited
10. Financial Management, Khan M.Y., Jain P.K, Tata Mcgraw Hill publishing Co
11. Financial Management, Pandey I.M., Vikas Publishing House
12. Financial Management. P.V. Rathanam, Kitab Mahal
13. Financial Management, Ravi. M. Kishore, Taxmann's

SESSION	TOPIC	METHOD OF TEACHING	REMARKS
<b>MODULE 1</b>			
1	Working capital management-meaning	Lecture	
2	Concept of working capital and classification	Lecture	
3	Determinants of working capital	Lecture	
4	Optimum level of current assets	Lecture	
5	Consequences of excess or deficit working capital	Lecture	
6	Liquidity Vs Profitability and Risk-return trade off	Lecture	
7	Working capital financing	Lecture	
8	Estimating working capital needs	Lecture & working out problems	
9	Methods of estimation of working capital	Lecture & working out problems	
10	Percentage of sales Method, Regression Method	Lecture & working out problems	
11	Budgetary method, Projected balance sheet method	Lecture & working out problems	
12	Operating Cycle method	Lecture & working out problems	
13	Estimation of Operating cycle & working capital	Lecture & working out problems	
14	Estimation of working capital	Lecture & working out problems	
15	Estimation of working capital	Lecture & working out problems	
16	Advanced Problems in estimation of working capital	Lecture & working out problems	Assignment1
<b>MODULE 2</b>			
17	Inventory management-meaning	Lecture	
18	Nature of inventory	Lecture	
19	Objectives of inventory management	Lecture	
20	Methods of inventory management	Lecture	
21	EOQ, Stock levels, VED, ABC, Just In Time, Perpetual Inventory system	Lecture & working out problems	
22	Inventory control	Lecture & working out problems	
23	Systems and methods of inventory control	Lecture & working out problems	

24	FIFO, LIFO, Standard price method, Average price method, Base stock method	Lecture & working out problems	
25	Need for inventory control	Lecture & working out problems	
26	Excess and deficit inventory	Lecture & working out problems	
27	Inventory valuation	Lecture & working out problems	
28	Methods of valuing inventory	Lecture & working out problems	Assignment2 1 <sup>st</sup> CIA
<b>MODULE 3</b>			
29	Receivables Management	Lecture	
30	Need and importance	Lecture	
31	Levels of receivables	Lecture	
32	Selection & evaluation of receivables	Lecture & working out problems	
33	Credit policy	Lecture & working out problems	
34	Credit evaluation	Lecture & working out problems	
35	Credit terms and collection of receivables	Lecture & working out problems	
36	Cost benefit analysis	Lecture & working out problems	
37	Average age of receivables	Lecture & working out problems	
38	Credit risk & default risk analysis	Lecture & working out problems	
39	Monitoring of receivables	Lecture & working out problems	
40	Factoring	Lecture & working out problems	Assignment3
<b>MODULE 4</b>			
41	Cash management, Meaning,	Lecture	
42	Motives for holding cash	Lecture	
43	Cash planning	Lecture & working out problems	
44	Managing cash flows	Lecture & working out problems	
45	Inflows and outflows	Lecture & working out problems	
46	Investing surplus cash	Lecture & working out problems	
47	Determining optimum cash balance	Lecture & working out problems	

48	Liquidity profitability analysis	Lecture & working out problems	Assignment4 2 <sup>nd</sup> CIA
<b>MODULE 5</b>			
49	Dividend decisions	Lecture	
50	Internal financing	Lecture	
51	Forms of dividend	Lecture	
52	Dividend policy	Lecture	
53	Objectives of dividend policy	Lecture	
54	Stability of dividend	Lecture	
55	Dividend theories	Lecture & working out problems	
56	Relevance and Irrelevance theories	Lecture & working out problems	
57	Walters Model	Lecture & working out problems	
58	Gordons Model	Lecture & working out problems	
59	Modigliani Miller Theory	Lecture & working out problems	
60	Residual theory	Lecture & working out problems	Assignment5
<b>DATE/SESSION</b>	<b>TOPIC OF ASSIGNMENT/SEMINAR</b>	<b>MODULES</b>	
Session 16	Estimation of working capital	MODULE 1	
Session 28	Inventory Management	MODULE 2	
Session 40	Receivables Management	MODULE 3	
Session 48	Cash Management	MODULE 4	
Session 60	Theories of dividend	MODULE 5	

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**COURSE TEACHER – DR. JOSEPH GEORGE**

<b>Course Code</b>	<b>P2COMT09</b>
<b>Title of the course</b>	<b>HUMAN RESOURCE MANAGEMENT</b>
<b>Semester in which the course is to be taught</b>	<b>Second</b>
<b>No. of credits</b>	<b>4</b>
<b>No. of contact hours</b>	<b>90</b>

**COURSE AIM/RATIONALE:**

**Familiarize students on the subject HRM**

**OBJECTIVES OF THE COURSE:**

- **To make students aware about the growing need and importance of HRM**
- **To familiarize the various concepts of HRP, HRD, recruitment, selection and related management functions**
- **To help students identify the scope and significance of HRM**

**COURSE DESIGN**

**MODULE - I**

HRM -Introduction - Nature – Feature – Scope – Objectives – Importance – Functions – Managerial and Operative Functions – Personnel Management Vs HRM, Qualification and Qualities of HR Manager – Evolution and growth of HRM in India

**(15 Hours)**

## **MODULE - II**

Human Resource Planning – Concept – Objectives and Importance Process – Limitation – Job Analysis.

Recruitment – Concepts – Sources – Methods – and Techniques of Man Power Recruitment – Characteristics of a good recruitment policy – Principles of recruitment – Factors affecting recruitment – Selection – Concepts and Procedures – Placement and Induction.

**(20 Hours)**

## **MODULE - III**

HRD – Concepts – objectives – Needs – Significance – Principles of HRD – Qualities of HRD Manager.

**(15 Hours)**

## **MODULE - IV**

Motivation – Meaning – Objectives – Types of Motivation – Management techniques to improve Motivation – Employees Morale and Productivity – Nature and Significance of Morale – Factors influencing Morale – Concepts and Significance of Productivity – Factors influencing Productivity – Performance Appraisal – Meaning – Purpose - Methods

**(20 Hours)**

## MODULE - V

Leadership – Styles – Theories – Managerial Grid – Contingency Theory – Theory X and Y – Situational Theory – Path Goal Theory – Leader Participation Model – Leader Member Exchange Theory – 3 D Model of Leadership – Likert’s Four System Model – Charismatic Leadership Theory – Transformational Leadership Theory – Social Learning Approach.

**(20 Hours)**

Sessions	Topic	Method	Remarks
1.	Introductory Session on HRM	LECTURE	
	<b>MODULE - I: HRM</b>		
2.	Definition ,Nature, Scope and Objectives of HRM	LECTURE	
3.	Need for HRM Approach	LECTURE	
4.	Importance of Human Resource Management	LECTURE	
5.	HRM Vs Human Resource Development	LECTURE	
6.	HRM and Personnel Management	LECTURE	
7.	Limitations of HRM	LECTURE	
8.	Personnel Management - Introduction, Definitions	LECTURE	
9.	Nature And Objectives of Personnel Management	LECTURE	
10.	Role of Personnel Manager Department	LECTURE	
11.	Personnel Management Vs HRM	LECTURE	
12.	The Changing Role of Personnel Department	LECTURE	
13.	Qualification and Qualities of Human Resource Manager	LECTURE	
14.	Evolution and Growth of HRM in India	LECTURE	
	<b>MODULE - II: HUMAN RESOURCE PLANNING</b>		

15.	Introduction and Definitions	LECTURE	
16.	Features, Objectives and Need For Human Resource Planning	LECTURE	
17.	Process of Human Resource Planning	LECTURE	
18.	Factors Affecting Human Resource Planning Types of Human Resource Planning	LECTURE	
19.	Levels of Human Resource Planning Benefits of Human Resource Planning	LECTURE	
20.	Suggestions for Making Human Resource Planning Effective	LECTURE	
21.	Components of Succession Planning Tips for Successful Succession Planning	LECTURE	
22.	Recruitment-Introduction, Meaning and Definitions	LECTURE	
23.	Recruitment Needs Process of Recruitment	LECTURE	
24.	Recruitment Policy Elements of a Good Recruitment Policy	LECTURE	
25.	Pre-Requisites of A Recruitment Policy Situational Factors Affecting Recruitment	LECTURE	
26.	Recruitment Organization Sources of Recruitment Internal Sources External Sources	LECTURE	
27.	Methods of Recruitment	LECTURE	



28.	Constraints And Challenges of Recruitment Recruitment Practices in India	LECTURE	
29.	Selection-Introduction Meaning and Definition	LECTURE	
30.	Selection Procedure Essentials of a Selection Procedure	LECTURE	
31.	Significance of Selection Procedure Organization for Selection	LECTURE	
32.	Selection Process	LECTURE	
33.	Training-Introduction, Meaning and Definitions Steps in systematic training plan	LECTURE	
34.	Training methods and techniques	LECTURE	
35.	Executive Development -Introduction, Meaning , Definitions, Features, Objectives and Importance	LECTURE	
36.	Process of Executive Development Methods/Techniques of Executive Development Decision Making Skills Inter-Personal Skills	LECTURE	
37.	Placement and Induction Introduction Meaning of Placement	LECTURE	
38.	Principles of Placement Problems in Placement	LECTURE	
39.	Induction-Definitions and Objectives Of Induction Contents of Induction Programme	LECTURE	
40.	Elements of Good Induction Programme	LECTURE	

	Problems in Induction		
41.	Induction Practices Induction Training in India	LECTURE	
42.	<b>First IAT</b>	<b>One hour exam</b>	
	<b>MODULE - III: HRD</b>		
43.	Introduction and Definitions of HRD	LECTURE	
44.	Features ,Objectives And Essentials of HRD	LECTURE	
45.	HRD at Macro and Micro Level Significance of HRD	LECTURE	
46.	Distinction Between Personnel Function and HRD Instruments or Mechanism of HRD	LECTURE	
47.	Implementation of HRD HRD Strategies	LECTURE	
	<b>MODULE - IV: MOTIVATION</b>		
48.	Motivation- Introduction, Definitions and Nature of Motivation	LECTURE	
49.	Types And Importance of Motivation, Techniques to Increase Motivation	LECTURE	
50.	Theories of Motivation and Motivational Techniques	LECTURE	
51.	Management By Objectives Elements In The MBO Process Advantages of MBO Limitations of MBO	LECTURE	
52.	Suggestions For Effective Implementation of MBO Definition of Job Satisfaction Factors Influencing Job Satisfaction	LECTURE	

53.	<p>Consequences of Job Satisfaction</p> <p>Job Enrichment</p> <p>Characteristics of an Enriched Job Enlargement</p>	LECTURE	
54.	<p>Job Enlargement Vs. Enrichment</p> <p>Job Rotation</p>	LECTURE	
55.	<p>Morale - Meaning and Definition</p> <p>Individual and Group Morale</p>	LECTURE	
56.	<p>High or Low Morale, Morale and Motivation</p> <p>Morale and Productivity</p>	LECTURE	
57.	Factors Affecting Morale and Causes of Low Morale	LECTURE	
58.	Warning Signs of Low Morale, Signs of High Morale and Factors Improving Morale	LECTURE	
59.	<p>Managing Quality and Productivity</p> <p>Introduction</p> <p>Defining Quality</p> <p>Total Quality Management (TQM)</p> <p>Elements of TQM</p>	LECTURE	
60.	<p>Characteristics of TQM</p> <p>Fundamentals of TQM</p> <p>Key Activity of a TQM System</p> <p>Major Process Components of TQM</p>	LECTURE	
61.	<p>Quality System Standards</p> <p>Quality Circles ( Qc)</p> <p>Characteristics Of Qc</p> <p>Organization of Qc's</p> <p>Benefits of Qc's</p>	LECTURE	

62.	Misconceptions About QC's Alternative Work Arrangements IT and HR Employee Attitude Surveys	LECTURE	
63.	Performance Appraisal-Introduction, Meaning ,Definition Features and Objectives of Performance Appraisal	LECTURE	
64.	Benefits and Uses of Performance Appraisal Limitations of Performance Appraisal	LECTURE	
65.	Performance Appraisal Process Methods of Performance Appraisal	LECTURE	
66.	Essentials of an Effective Appraisal System Legal and Ethics Issues in Performance Appraisal Performance Appraisal of Executives/Managers	LECTURE	
	<b>MODULE -V: LEADERSHIP STYLES</b>		
67.	Leadership-Introduction ,Definitions Nature and Characteristics of Leadership	LECTURE	
68.	Leadership Styles or Types of Leaders	LECTURE	
69.	The Managerial Grid Leadership Functions	LECTURE	
70.	Importance of Leadership in Management Successful Leadership Vs Effective Leadership	LECTURE	
71.	Theories of Leadership	LECTURE	
72.	Theories of Leadership	LECTURE	
73.	Theories of Leadership	LECTURE	
74.	Theories of Leadership	LECTURE	

75.	Criticism of The Trait Approach	LECTURE	
76.	<b>Second IAT</b>	<b>Two hour exam</b>	
77.	Discussion on the IAT PAPER		
78.	REVISION MODULE - I		
79.	REVISION MODULE - I		
80.	REVISION MODULE - II		
81.	REVISION MODULE - II		
82.	REVISION MODULE - III		
83.	REVISION MODULE - III		
84.	REVISION MODULE - IV		
85.	REVISION MODULE - IV		
86.	REVISION MODULE - V		
87.	REVISION MODULE - V		
88.	Previous Years QP Discussions		
89.	Previous Years QP Discussions		
90.	Evaluation of the Course		

### **BASIC REFERENCES**

1. Fundamentals of HRM – Rajib Lochan Dhar
2. Human Resource Management – Seema Sanghi
3. Personnel Management and HRM – Subbarao
4. Human Resource Management – Fisher
5. Human Resource Management – C. B. Gupta
6. Human Resource Management – L. M. Prasad
7. Advance HRM – S. C. Gupta
8. Human Resource Management - Bratton

**COURSE TEACHER: DR. SAJOY P B**

COURSE CODE	
TITLE OF THE COURSE	OPERATIONS RESEARCH
SEMESTER IN WHICH THE COURSE IS TO BE TAUGHT	II
NO. OF CREDITS	4
NO. OF CONTACT HOURS	75

**COURSE RATIONALE**

To enable the students to understand various techniques used in operation management decisions

**COURSE DESIGN**

- ❖ **MODULE – 1** Operations research-meaning-origin and development-nature-OR in India-OR as a tool in decision making-OR and management-features and methodology of OR-Phases of OR study-models in OR-methods of deriving the solution-limitations of OR.

(5 Hr.)
- ❖ **MODULE – 2** Linear Programming-meaning-concepts-notations-uses and applications-formulation-graphical solution-simplex method-introduction of slack, surplus and artificial variable-duality.

(30 hrs)
- ❖ **MODULE – 3** - Transportation problems- different initial allocation methods-move towards optimality-MODI method of solving transportation problems. Assignment problems-solutions-variations in assignment problems.

(20 hrs)
- ❖ **MODULE – 4** Decision Theory-Quantitative approach to management decision making-decision under conditions of uncertainty-Maximin-Maximax-Hurwics, Laplace and Minimax regret criteria-Decision making under risk-EMV-EOL-EVPI criteria-decision tree analysis- Game theory-Queing theory.

(20 Hrs.)

- ❖ **MODULE – 5** Network analysis-CPM and PERT-Network concepts-construction of network diagram-numbering the events (Fulkerson’s Rule), requirements-Network calculations-CPM-Concept of float-PERT-probability considerations in PERT-calculation of float/slack under PERT-PERT calculations-points of similarities and dissimilarities in PERT and CPM-limitation of PERT and CPM.

(15 Hrs.)

### LEVEL OF KNOWLEDGE

To make the students capable to understand the fundamental concepts of operations research and various techniques used in operations management decisions.

### SKILL DEVELOPMENT

- Time management
- Communication
- Comprehension
- Application of tools
- Analysis
- Organization
- Adaptability
- Openness

### DETAILED SYLLABUS DELIVERY

Session	Date	Topic	Method	Remarks
1	Day 1	Operations research-meaning.	Lecture, Discussion	
2	Day 2	Operations research-origin and development	Lecture, Discussion	
3	Day 3	Operations research- nature	Seminar, Discussion	
4	Day 4	Operations Research in India	Seminar, Discussion	
5	Day 5	OR as a tool in decision making	Lecture, Discussion	

6	Day 6	OR as a tool in decision making	Seminar, Discussion	
7	Day 7	OR and management	Seminar, Discussion	
8	Day 8	OR and management	Lecture, seminar, discussion	
9	Day 9	Features and methodology of OR	Lecture, seminar, discussion	
10	Day 10	Features and methodology of OR	Lecture, seminar, discussion	
11	Day 11	Phases of OR study	Lecture, seminar, discussion	
12	Day 12	Models in OR	Lecture, seminar, discussion	
13	Day 13	Models in OR	Lecture, seminar, discussion	
14	Day 14	Methods of deriving the solution	Lecture, Discussion	
15	Day 15	Methods of deriving the solution	Discussion	
16	Day 16	Limitations of OR	Lecture, Discussion	
17	Day 17	Linear Programming-meaning	Lecture, Discussion	
18	Day 18	Linear Programming-concepts	Lecture, Discussion	
19	Day 19	Linear Programming-notations	Lecture, Discussion	
20	Day 20	Linear Programming-uses and applications-	Lecture, Seminar Discussion	



21	Day 21	Linear Programming- formulation	Lecture, Seminar Discussion	
22	Day 22	Linear Programming- graphical solution	Demonstration, Discussion	
23	Day 23	Linear Programming- graphical solution	Demonstration, Discussion	
24	Day 24	Linear Programming- graphical solution	Demonstration, Discussion	
25	Day 25	Linear Programming-simplex method	Lecture, Seminar Discussion	
26	Day 26	Linear Programming-simplex method	Lecture, Seminar Discussion	
27	Day 27	Linear Programming-simplex method	Lecture, Seminar Discussion	
28	Day 28	Linear Programming-simplex method	Lecture, Seminar Discussion	
29	Day 29	Introduction of slack, surplus and artificial variable	Lecture, Seminar Discussion	
30	Day 30	Introduction of slack, surplus and artificial variable	Lecture, Seminar Discussion	
31	Day 31	Introduction of slack, surplus and artificial variable	Lecture, Discussion	
32	Day 32	Duality	Lecture, Discussion	
33	Day 33	Duality	Demonstration, Discussion	
34	Day 34	Transportation problems- different initial allocation methods	Demonstration, Discussion	
35	Day 35	Transportation problems- different initial allocation methods	Discussion	

36	Day 36	Transportation problems-different initial allocation methods	Lecture, Discussion	
37	Day 37	Transportation problems-move towards optimality	Seminar, Discussion	
38	Day 38	Transportation problems-move towards optimality.	Seminar, Discussion	
39	Day 39	Transportation problems-move towards optimality	Seminar, Discussion	
40	Day 40	MODI method of solving transportation problems.	Seminar, Discussion	
41	Day 41	MODI method of solving transportation problems.	Seminar, Discussion	
42	Day 42	MODI method of solving transportation problems.	Seminar, Discussion	
43	Day 43	MODI method of solving transportation problems.	Lecture, Discussion	
44	Day 44	Assignment problems-solutions	Seminar, Discussion	
45	Day 45	Assignment problems-solutions	Seminar, Discussion	
46	Day 46	Assignment problems-solutions	Lecture, Discussion	
47	Day 47	Assignment problems-solutions	Seminar, Discussion	
48	Day 48	Variations in assignment problems	Seminar, Discussion	
49	Day 49	Variations in assignment problems	Lecture, Seminar	
50	Day 50	Decision Theory	Lecture, Seminar	

51	Day 51	Decision theory-Quantitative approach to management decision making	Lecture, Seminar	
52	Day 52	Decision theory-decision under conditions of uncertainty	Lecture, Seminar	
53	Day 53	Decision under conditions of uncertainty-Maximin & Maximax	Demonstration, Discussion	
54	Day 54	Decisions under conditions of uncertainty-Hurwics and Laplace	Demonstration, Discussion	
55	Day 55	Decisions under conditions of uncertainty-Minimax regret criteria	Discussion	
56	Day 56	Decisions under risk- EMV and EOL	Lecture, Discussion	
57	Day 57	Decisions under risk-EVPI criteria	Lecture, Discussion	
58	Day 58	Decision tree analysis	Lecture, Discussion	
59	Day 59	Decision tree analysis	Lecture, Seminar	
60	Day 60	Game theory	Lecture, Seminar	
61	Day 61	Game theory	Lecture, Discussion	
62	Day 62	Queuing theory	Lecture, Seminar	
63	Day 63	Queuing theory	Lecture, Seminar	
64	Day 64	Network analysis	Lecture, Discussion	
65	Day 65	-Network concepts-CPM and PERT	Lecture, Seminar	

66	Day 66	Construction of network diagram-numbering the events (Fulkerson's Rule), requirements	Lecture, Seminar	
67	Day 67	Construction of network diagram-numbering the events (Fulkerson's Rule), requirements	Lecture, Discussion	
68	Day 68	Network calculations-CPM- Concept of float	Lecture, Seminar	
69	Day 69	PERT-probability considerations in PERT	Lecture, Seminar	
70	Day 70	Calculation of float/slack under PERT-PERT calculations	Lecture, Discussion	
71	Day 71	Calculation of float/slack under PERT-PERT calculations	Lecture, Seminar	
72	Day 72	Calculation of float/slack under PERT- PERT calculations	Lecture, Seminar	
73	Day 73	Points of similarities and dissimilarities in PERT and CPM.	Demonstration, Discussion	
74	Day 74	points of similarities and dissimilarities in PERT and CPM.	Demonstration, Discussion	
75	Day 75	Limitations of PERT and CPM.	Discussion	

## **SUGGESTED READINGS**

1. Operation research, theory and applications, J.K. Sharma, Macmillan India limited.
2. Operations Research: Principles and Practice, Ravindran.
3. Research methodology and OR, H.R. Ramanath, Himalaya Publishing House
4. Operation Research, V.K. Kapoor, Sultan Chand Co;
5. OR, Sarmma &Ananad, Himalaya Publishing House
6. Operation Research, Kanthi Swarup, Sultan Chand Co;
7. Operation Research, SD. Sharma, Kedarnath Co;
8. Operation Research-problem and solutions, J.K.Sharma, Macmillain India limited.
9. Operations Research, K.K. Chawla, Gupta & Sharma; Kalyani Publishers