Course Code	Course Name	Category	L	T	P	Credit
20MBA232	**FINANCIAL INFORMATION ANALYSIS**	**Elective**	**3**	**0**	**0**	**3**

Preamble: The course on Financial Information Analysis provides a framework for the students to analyse a firm's past financial performances to aid managerial decision making. The course equip students to forecast the future performance and also to evaluate the overall growth of the firm, which could help them in making major financial decisions. The course also helps to integrate the key concepts from accounting, finance and economics which will help in evaluating the long run performance of the firm.

Prerequisite: NIL

Course Outcomes: After the completion of the course the student/s will be able to:

CO 1	Understand the techniques of financial information analysis and its significance in business.
CO 2	Develop and apply the concept of financial information in the business.
CO 3	Analyse & infer the financial statements and comment on the current and past performances of the business.
CO 4	Develop competence in managerial decision making and control.
CO 5	Evaluate the importance of Valuation and Financial Modelling.

Mapping of course outcomes with program outcomes

	PO 1	PO 2	PO 3	PO 4	PO 5
CO 1	2	2	1	1	2
CO 2	3	-	-	2	3
CO 3	1	3	-	3	2
CO 4	2	2	1	1	3
CO 5	-	1	-	1	1

Assessment Pattern

Bloom's Category	Continuous Assessment Tests (in %)		End Semester Examination (in marks)
	1	**2**	
Remember	20	20	10
Understand	40	40	30
Apply	40	40	20
Analyze			
Evaluate	Can be done through Assignments/ Seminars/Mini Projects		
Create	Can be done through Assignments/ Seminars/Mini Projects		

Mark distribution

Total Marks	CIE	ESE	ESE Duration
100	40	60	3 hours

Continuous Internal Evaluation Pattern:

Attendance   : 4 marks

Continuous Assessment Test (2 numbers)   : 16 marks

Assignment/Quiz/Course project   : 10 marks

Seminar and Discussion   : 10 marks

End Semester Examination Pattern:

There will be three parts; Part A, Part B and part C. Part A contains 5 questions (one question each from each module) of 2 marks each (Students should answer all questions). Part B contains 5 questions (one question each from each module) of 10 marks each (Students have the choice of answering any three questions). Part C contains a compulsory question (can have sub-divisions) of 20 marks (from any of the modules or combination) may be in application-level or case study.

Model Question paper

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
FOURTH SEMESTER MBA DEGREE EXAMINATION

20MBA232 - FINANCIAL INFORMATION ANALYSIS

Max. Marks: 60   Duration: 3 Hours

PART A
Answer *all* questions. Each question carries 2 marks.

1. Write a short note on fund from operation.
2. What are the long-term solvency ratios?
3. What is the use of ROCE?
4. Explain the term accounting rate of return.
5. Write a short note on price earnings ratio.

(5x2 marks = 10 marks)

PART B
Answer any *three* questions. Each question carries 10 marks

6. (a) What are the objectives of fund flow statement
   (b) Prepare the format of Balance sheet of a company

7. The Balance Sheet of Anish Ltd. as at 31st March 2017 as under.

Liabilities	Rs	Assets	Rs
Share Capital	2,00,000	Goodwill	1,20,000
Reserves and Surplus	58,000	Plant	1,50,000
Debentures	1,00,000	Stock	80,000
Creditors	40,000	Debtors	45,000
Bills Payable	20,000	Cash	17,000
Other Current Liabilities	2,000	Other Current Assets	8,000
	4,20,000		4,20,000

In this period total sales for the year was Rs.4,00,000, cost of goods sold Rs.2,40,000 and Net Profit 50,000.

(a) Calculate (i) Current ratio (ii) quick ratio (iii) debt equity ratio (iv) proprietary ratio (v) inventory turnover (vi) debtors turnover (vii) debt collection period (viii) fixed asset turnover (ix) gross profit ratio and (x) net profit ratio.

(b) Comment on these ratios.

8. Explain DuPont analysis.

9. Explain the process of forecasting income statement and balance sheet of a company. How forecasting helps the investment decisions?

10. Explain various valuation ratios. How valuation ratios help in determining the growth of the share price of a company?

(3x10 marks = 30 marks)

PART C

Compulsory question. This question carries 20 marks

11. You have the following information on the performance of Prosper Company and the industry averages:
    a) Calculate the ratios (listed below) for the Prosper Company. (10)
    b) Indicate the company's strengths and weaknesses considering the industry standards for each ratios. (10)

Balance Sheet as on 31st December 2018			
Liabilities	Rs	Assets	Rs
Equity Share capital	24,00,000	Net Fixed Assets	12,10,000
10% debentures	4,60,000	Cash	4,40,000
Sundry Creditors	3,30,000	Sundry debtors	5,50,000
Bills Payable	4,40,000	Stock	16,50,000
Other current Liabilities	2,20,000		
	38,50,000		38,50,000

Statement of profit for the year ending 3st December 2018

Sales		55,00,000
Less: Cost of goods sold:		
Material	20,90,000	
Wages	13,20,000	
Factory overheads	6,49,000	40,59,000
Gross Profit		14,41,000
Less Selling and distribution cost	5,50,000	
Administration and general expenses	6,14,000	11,64,000
Earnings before interest and taxes		2,77,000
Less interest charges		46,000
Earnings before Taxes		2,31,000
Less taxes (50%)		1,15,500
Net Profit		1,15,500

Ratios considered	Industry
Current Ratio	2.4
Sales/Debtors	8.0
Sales/Stocks	9.8
Sales/Total Assets	2.0
Net profit/Sales	3.3%
Net profit/Total assets	6.6%
Net profit/Net worth	10.7%
Total Debts/Total assets	63.5%

	Syllabus
Module 1	**Introduction to Financial statements** Balance sheet-Income Statements, Fund flow statements; Uses of financial statements; Financial statement analysis- Inter firm and intra firm analysis.
Module 2	**Techniques for Financial Statement Analysis** Comparative financial statements, common size financial statements, trend analysis, Percentages; Ratio Analysis- role of ratios in financial analysis, short term solvency analysis, long term solvency analysis,
Module 3	**Techniques for Financial Statement Analysis** Ratios – Profitability analysis, activity analysis- market capitalisation ratios - DuPont Analysis; Cash flow analysis- cash flow statements-format and presentation of cash flows
Module 4	**Forecasting and projections** Forecasting Income statement and Balance sheet, forecasting from book value; forecasting from earnings and book value, Forecasting from accounting rate of returns-forecasting profitability and sales.
Module 5	**Valuation and Modelling** Adjusted book value, Price to-book ratios and Price earnings ratio- EV to EBITDA ratio-EV to Sales Ratio- EV to Capital Employed ratio-Dividend Yield-Earning Yield-PEG Ratio- Trading comparable analysis-Cost of Capital - Discounted cash flow model (DCF)& Free cash flow model (FCF)- Sum-Of-The-Parts (SOTP) Valuation concept-Residual Income Model and Market Based Valuation.

Text Books

1. Pandey I. M., (2015), "*Financial Management*", Vikas Publishing House Private Ltd.

2. Brigham F. Eugene and Houston F. Joel, (2014), "*Fundamentals of Financial Management*",14th edition, Thomson India Edition.

3. Easton McAnally, Sommers Zhang (2018), "*Financial Statement Analysis & Valuation,*", 5th edition, Cambridge Business Publishers.

References and Suggested Readings

1. Fridson Martin, Alvarez Fernando (2011), "*Financial Statement Analysis: A Practitioners' guide*", USA, Wiley Finance

2. Maheshwari S. N., Maheshwari Suneel (2018). "*A Textbook of Accounting for Management*", Fourth Edition, New Delhi, Vikas Publication.

3. Sinha Gokul (2012), "*Financial Statement Analysis*", PHI Learning Private Limited.

4. White I., Gerald Sondhi C., Ashwin Paul, Fried Dov, (2008), *"The Analysis and Use of Financial Statements",* Third Edition, USA Wiley Publication.

5. Arora R. (2018), "*Financial Accounting: Fundamental Analysis and Reporting",* Wiley Publication.

Course Contents and Lecture Schedule

No	Topic	No. of Lectures
1	**Introduction to Financial statements**	
1.1	Balance sheet-Income Statements, Fund flow statements	3 Hours
1.2	Uses of financial statements; Financial statement analysis	2 Hours
1.3	Inter firm and intra firm analysis	2 Hours
2	**Techniques for Financial Statement Analysis**	
2.1	Comparative financial statements, common size financial statements	2 Hours
2.2	Trend analysis, Percentages; Ratio Analysis- role of ratios in financial analysis,	3 Hours
2.3	Short term solvency analysis, long term solvency analysis,	3 Hours
3	**Techniques for Financial Statement Analysis**	
3.1	Ratios – Profitability analysis, activity analysis-	3 Hours
3.2	market capitalisation ratios -DuPont Analysis;	2 Hours
3.3	Cash flow analysis- cash flow statements-format and presentation of cash flows	2 Hours
4	**Forecasting and projections**	
4.1	Forecasting Income statement and Balance sheet,	3 Hours
4.2	Forecasting from book value; forecasting from earnings and book value.	2 Hours
4.3	Forecasting from accounting rate of returns-forecasting profitability and sales.	2 Hours
5	**Valuation and Modelling**	
5.1	Adjusted book value, Price to-book ratios and Price earnings ratio- EV to EBITDA ratio-EV to Sales Ratio- EV to Capital Employed ratio- Dividend Yield-Earning Yield-PEG Ratio -Trading comparable analysis-	3 Hours
5.2	Cost of Capital - Discounted cash flow model (DCF)& Free cash flow model (FCF)	2 Hours
5.3	Sum-Of-The-Parts (SOTP) Valuation Concept -Residual Income Model and Market Based Valuation.	2 Hours
	Total	36 Hours

Course Code	Course Name	Category	L	T	P	Credit
20MBA234	**FINANCIAL DERIVATIVES**	Elective	3	0	0	3

Preambles:

This course aims at providing an in-depth understanding of financial derivatives in terms of concepts, structure, instruments and trading strategies for profit and risk management. The objective of this course is to introduce the participants to derivative instruments, namely, forwards, futures, options and swaps, and their valuation.

Prerequisite: Nil

Course Outcomes: After the completion of the course student will be able to:

CO1	Recall the concept of financial derivatives and risk management
CO2	Explain the concept of future contracts and computation of value and price of future contracts.
CO3	Identify the concept of options contracts and create trading strategies involving option contracts.
CO4	Analyse the price of options contracts.
CO5	Evaluate the concept of swaps and computation of value and price of swaps.

Mapping of course outcomes with Program outcomes

	PO 1	PO 2	PO 3	PO 4	PO 5
CO 1	2	2	3	2	3
CO 2	2	3	1	3	2
CO 3	1	2	3	2	3
CO 4	2	1	3	2	3
CO 5	3	2	1	3	2

Assessment Pattern

Bloom's Category	Continuous Assessment Tests (in %)		End Semester Examination (in marks)
	1	**2**	
Remember	20	20	10
Understand	40	40	30
Apply	40	40	20
Analyze			
Evaluate	Can be done through Assignments/ Seminars/Mini Projects		
Create	Can be done through Assignments/ Seminars/Mini Projects		

Mark distribution

Total Marks	CIE	ESE	ESE Duration
100	40	60	3 hours

Continuous Internal Evaluation Pattern:

Attendance   : 4 marks

Continuous Assessment Test (2 numbers)   : 16 marks

Assignment/Quiz/Course project   : 10 marks

Seminar and Discussion   : 10 marks

End Semester Examination Pattern:

There will be three parts; Part A, Part B and part C. Part A contains 5 questions (one question each from each module) of 2 marks each (Students should answer all questions). Part B contains 5 questions (one question each from each module) of 10 marks each (Students have the choice of answering any three questions). Part C contains a compulsory question (can have sub-divisions) of 20 marks (from any of the modules or combination) may be in application-level or case study.

Model Question paper

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

FOURTH SEMESTER MBA DEGREE EXAMINATION

20MBA234 FINANCIAL DERIVATIVES

Max. Marks: 60   Duration: 3 Hours

PART A
Answer *all* questions. Each question carries 2 marks.

1. Explain the features of derivatives.
2. What are the benefits of futures?
3. Explain the process of MTM.
4. Distinguish between futures and forwards.
5. What are the economic functions of swap transactions?

(5x2 marks = 10 marks)

PART B
Answer any *three* questions. Each question carries 10 marks

.
6. Discuss the process of hedging with stock index futures.
7. Explain briefly the major players in derivative markets.
8. "Long call and short put are strategies for bullish market". Discuss.
9. Explain straddle with the help of an example.
10. Elaborate the evolution of swap dealings.

(3x10 marks = 30 marks)

PART C
Compulsory Question. This question carries 20 marks

11. "Derivatives are financial products for management of exchange rate risks". Do you agree? Give reasons.

(1x20 marks=20 Marks)

	Syllabus
Module 1	**Introduction to Financial Derivatives:** Introduction to risk management–Meaning and need–importance–Types of market risk – Risk management issues in business – Financial derivatives–Meaning – Need – Growth of financial derivatives markets in India – Derivative markets – Exchange traded financial derivatives for risk management in India – Participants – Functions – Types of risk management instruments — The regulatory framework of derivative trading in India.
Module 2	**Forward and Futures Contract:** Forward Contract - Future's growth and development - Difference between forwards and futures - financial future - Future trading – Currency futures – Interest rate futures - Pricing and valuation of future contacts – Value at risk-Hedging risk–Hedging with stock index future –Types of members and margin system in India-Future trading in stock exchange for risk management.
Module 3	**Option Contracts:** Options–meaning–needs and importance- options and futures- fundamentals - option strategies- types of option- put- call- Valuation of options-trading strategies of risk instruments- positions in options- stock indices-options in Indian stock market.
Module 4	**Pricing of Options:** Risk pricing of options- intrinsic value and time value -pricing at the expiry of contact- factors affecting option pricing–put– call– parity pricing-models of pricing – Binomial option-pricing models –Black Scholes pricing methods.
Module 5	**Swap:** Swaps-meaning and definition-development structure of swap dealing for risk management– interest rate swaps- cancellable and extendable swaps – Types of swaps– Currency swaps — Recent trends in derivatives.

Text Books
1. Jayanth Rama Varma, (2008). *Derivatives and Risk Management*, TMH, Latest Edition.
2. Mishra B. and Debasish S. S., (2011) *Financial Derivatives*, Excel publishers, Latest Edition.
3. Gupta S. L., (2005). *Financial Derivatives: Theory, concepts and problems*, Prentice Hall of India,
4. Kumar S. S. (2007). *Financial Derivatives*, Prentice Hall of India, Latest Edition.
Reference and Suggested Readings
1. Kevin Dowd. (2002). *Measuring Market risk*, second edition. Wiley.
2. John C. Hull and Sankarshan Basu (2018). *Options futures and other derivatives*, tenth edition. Pearson Education.
3. Bhole L. M., () *Financial Institutions and Markets–Structure, Growth and Innovations*, Tata McGraw Hill Publishing Co. Ltd. New Delhi.
4. Patwari D. C. & Bhargava A., *Options and Futures, An Indian Perspective*, JAICO Publishing.

Course Content and Lecture Schedule

No.	Topic	No. of Lectures
1	**Introduction to Financial Derivatives**	
1.1	Introduction to risk management.	3 Hours
1.2	Growth of financial derivatives markets in India – Derivative markets.	2 Hours
1.3	Types of risk management instruments.	2 Hours
2	**Forward and Futures Contract**	
2.1	Forward Contract and Future's growth and development.	2 Hours
2.2	Currency futures and Interest rate futures.	3 Hours
2.3	Hedging with stock index future.	2 Hours
3	**Option Contracts**	
3.1	Option strategies	3 Hours
3.2	Valuation of options	2 Hours
3.3	Options in Indian stock market.	2 Hours
4	**Pricing of Options**	
4.1	Risk pricing of options and intrinsic value and time value.	3 Hours
4.2	Parity pricing-models of pricing.	2 Hours
4.3	Binomial option-pricing models –Black Scholes Pricing.	2 Hours
5	**Swap**	
5.1	Development structure of swap dealing for risk management	3 Hours
5.2	Interest rate and Currency swaps	3 Hours
5.3	Valuation and pricing of swaps-risk management function of swap transaction	2 Hours
	Total	36 Hours

Course Code	Course Name	Category	L	T	P	Credit
20MBA236	**FINANCIAL RISK MANAGEMENT**	Elective	3	0	0	3

Preamble: There is a growing recognition for finance professionals having a comprehensive understanding of financial risk management. This course is expected to help students specializing in finance to understand a wide variety of risk related concepts and theories, and keep them updated on the rapidly evolving marketplace. It introduces the student with the current thinking and approaches to financial risk-related issues.

Prerequisite: NIL

Outcomes (COs): After the completion of the course the student will be able to

CO 1	Recall all the concept of risk management.
CO 2	Explain various concepts relativity to management of market risk.
CO 3	Identifying the various concepts relating to management of credit risk.
CO 4	Analyze various financial risk faced by institution.
CO 5	Evaluate the integrated risk environment of the organisation and learning from past events.

Mapping of course outcomes with program outcomes

	PO 1	PO 2	PO 3	PO 4	PO 5
CO 1	2	2	3	3	3
CO 2	2	3	2	2	2
CO 3	1	2	3	3	3
CO 4	2	1	2	3	2
CO 5	2	2	3	2	2

Assessment Pattern

Bloom's Category	Continuous Assessment Tests (in %)		End Semester Examination (in marks)
	1	**2**	
Remember	20	20	10
Understand	40	40	30
Apply	40	40	20
Analyze			
Evaluate	Can be done through Assignments/ Seminars/Mini Projects		
Create	Can be done through Assignments/ Seminars/Mini Projects		

Mark distribution

Total Marks	CIE	ESE	ESE Duration
100	40	60	3 hours

Continuous Internal Evaluation Pattern:

Attendance : 4 marks

Continuous Assessment Test (2 numbers) : 16 marks

Assignment/Quiz/Course project : 10 marks

Seminar and Discussion : 10 marks

End Semester Examination Pattern:

There will be three parts; Part A, Part B and part C. Part A contains 5 questions (one question each from each module) of 2 marks each (Students should answer all questions). Part B contains 5 questions (one question each from each module) of 10 marks each (Students have the choice of answering any three questions). Part C contains a compulsory question (can have sub-divisions) of 20 marks (from any of the modules or combination) may be in application-level or case study.

Model Question paper

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
FOURTH SEMESTER MBA DEGREE EXAMINATION
20MBA236 - FINANCIAL RISK MANAGEMENT

Max. Marks: 60   Duration: 3 Hours

PART A
Answer *all* questions. Each question carries 2 marks.

1. Define risk management?

2. List out the concept of market risk?

3. What is credit risk?

4. Recall the concept of enterprise risk management?

5. Define CRISIL

(5x2 marks = 10 marks)

PART B
Answer any *three* questions. Each question carries 10 marks

6. Explain the role of risk manager in solving various risk faced by the organizations?

7. Differentiate Stress Testing and Black Testing?

8. Examine the role of credit rating agencies?

9. Briefly explain the foreign exchange risk in detail? Give examples?

10. Discuss the concept of enterprise risk management?

(3x10 marks = 30 marks)

PART C
Compulsory question. This question carries 20 marks

11. (a) Briefly explain the credit crisis of 2007and how it impacted the world economy?   (10)

    (b) List out the financial disasters faced by J.P.Morgan, Bankers Trust and Citi group? (10)

	Syllabus
Module 1	**Foundations of Risk Management:** Definition and measurement of risk, evolution, environment, nature and sources of risk, conflict between risk and value creation, role of a risk manager, risk faced by modern organizations – market risk (interest rate risk, equity risk, foreign exchange risk, commodity risk), credit risk (default risk, bankruptcy risk, credit rating risk, settlement risk), liquidity risk, operational risk, legal and regulatory risk, business risk, strategic risk, reputation risk, system risk, reasons to manage and not to manage risk, risk management process, corporate governance and risk management, key corporate governance concerns, risk governance, committees and risk limits, delegation process.
Module 2	**Management of Market Risk:** Concept of market risk, sources of market risks. Measures of market risk. Value at Risk. Risk Metrics Approach. Historic Simulations. Monte Carlo Simulations. Portfolio Risk Measure. Portfolio Risk Budgeting. Stress Testing and Back Testing. Capital Charges.
Module 3	**Management of Credit Risk:** Concept of Credit Risk. Individual Loan Risks. Measurement of Credit Risk. Default Risk Models. Loan Portfolio and Concentration Risk. Credit Ratings. Credit Derivatives. Capital Charges.
Module 4	**Management of Other Institutional Risk:** Other types of financial risks faced by the institutions. Measures and handling of Off-Balance-sheet risks, foreign exchange risks, sovereign risk, liquidity risk, technology and other operational risks. Risk hedging and management. Capital charges. **Enterprise Risk Management:** Concept of Enterprise Risk Management (ERM). Principal terms in Enterprise Risk Management. Integrated approach to Risk Management. Framework for risk management and control. Risk frameworks under regulatory environments.
Module 5	**Credit Crisis of 2007:** The U.S. housing market, securitization, the crisis, lessons from the crisis. **Financial Disasters:** Moral hazards, ponzi schemes, adverse selection, winners curse, market making vs. position taking. Disaster's due to misleading reporting – Barings Bank, UBS, Societe Generale. Disaster due to large market moves – Long Term Capital Management (LTCM), Metallgesellschaft (MG), Disasters due to conduct of business - Bankers Trust (BT), JP Morgan, Citigroup and Enron. typology of risk management failures.

Text Books

1. Allen Steve (2012). *Financial Risk Management: A Practitioner's Guide to Managing Market and Credit Risk*. John Wiley, New Delhi.

2. Apostolik Richard and Donohue Christopher (2015). *Foundations of Financial Risk: An Overview of Financial Risk and Risk-Based Regulation.* John Wiley, New Jersey.

3. Crouhy Michel, Galai Dan and Mark Robert (2014). *The Essentials of Risk Management. M*cGraw Hill, New Delhi.

Reference Books

1. Christoffersen Peter (2016). *Elements of Financial Risk Management: A Buyside Perspective Using Excel and MATLAB*. Academic Press, London.
2. Jorion Philippe (2013). *Financial Risk Manager Handbook*. John Wiley, New Delhi.

3. Hull John (2012). *Risk Management and Financial Institutions*. John Wiley, New Delhi.
4. Professional Risk Managers International Association. *PRM Handbook Volume III: Book 1-3. PRMIA* Publications, USA (2015).
5. Resti Andrea and Sironi Andrea (2007). *Risk Management and Shareholders' Value in Banking: From Risk Measurement Models to Capital Allocation Policies*. John Wiley, London.
6. Saunders Antony and Cornett Marcia (2017). *Financial Institutions Management: A Risk Management Approach*. McGraw-Hill, New Delhi.
7. Stutz Rene (2008). Risk Management Failures: What Are They and When Do They Happen? *Journal of Applied Corporate Finance*, Vol. 20, No. 4, 39-48.

Course Contents and Lecture Schedule

No	Topic	No. of Lectures
1	**Foundations of Risk Management**	
1.1	Definition and measurement of risk	2 hrs
1.2	Risk faced by modern organizations	2 hrs
1.3	Risk management process	3 hrs
2	**Management of Market Risk**	
2.1	Concept of market risk	2 hrs
2.2	Portfolio Risk Measure.	2 hrs
2.3	Portfolio Risk Budgeting	3 hrs
3	**Management of Credit Risk**	
3.1	Concept of Credit Risk	1 hr
3.2	Measurement of credit risk	2 hrs
3.3	Credit Ratings.	2 hrs
3.4	Credit Derivatives	2 hrs
4	**Management of Other Institutional Risk**	
4.1	Other types of financial risks faced by the institutions	2 hrs
4.2	Foreign exchange risk	2 hrs
4.3	Enterprise risk management	3 hrs
5	**Credit Crisis of 2007**	
5.1	The U.S. housing market, securitization, the crisis,	2 hrs
5.2	Lessons learned from the crisis.	2 hrs
5.3	Disaster's due to misleading reporting	2 hrs
5.4	Disasters due to conduct of business	2 hrs
	Total	36 hours

Course Code	Course Name	Category	L	T	P	Credit
20MBA238	STRATEGIC FINANCIAL MANAGEMENT	Elective	3	0	0	3

Preamble: The course aims at imparting an in-depth knowledge about strategic financial management in terms of concepts, corporate valuation methods, types of corporate risk, investment decisions, financial analysis and its tools. This course also aims at introducing merger strategy and takeover strategy to the participants.

Prerequisite: NIL

Course Outcomes (COs): After the completion of the course the student will be able to: -

CO 1	Recall the concept of strategic financial management and corporate valuation methods.
CO 2	Illustrate various investment alternatives under risk and uncertainty.
CO 3	Develop the financial statements using traditional and modern approaches.
CO 4	Analyse the concept and types of mergers and its impact on the firm.
CO 5	Evaluate the concept of takeover strategy.

Mapping of course outcomes with Program outcomes

	PO 1	PO 2	PO 3	PO 4	PO 5
CO 1	3	2	1	3	2
CO 2	2	3	2	3	3
CO 3	2	3	2	3	3
CO 4	3	2	2	2	3
CO 5	3	3	1	3	2

Assessment Pattern

Bloom's Category	Continuous Assessment Tests (in %)		End Semester Examination (in marks)
	1	2	
Remember	20	20	10
Understand	40	40	30
Apply	40	40	20
Analyze			
Evaluate	Can be done through Assignments/ Seminars/Mini Projects		
Create	Can be done through Assignments/ Seminars/Mini Projects		

Mark distribution

Total Marks	CIE	ESE	ESE Duration
100	40	60	3 hours

Continuous Internal Evaluation Pattern:

Attendance   : 4 marks

Continuous Assessment Test (2 numbers)   : 16 marks

Assignment/Quiz/Course project   : 10 marks

Seminar and Discussion   : 10 marks

End Semester Examination Pattern:

There will be three parts; Part A, Part B and part C. Part A contains 5 questions (one question each from each module) of 2 marks each (Students should answer all questions). Part B contains 5 questions (one question each from each module) of 10 marks each (Students have the choice of answering any three questions). Part C contains a compulsory question (can have sub-divisions) of 20 marks (from any of the modules or combination) may be in application-level or case study.

Model Question paper

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
FOURTH SEMESTER MBA DEGREE EXAMINATION

20MBA238 - STRATEGIC FINANCIAL MANAGEMENT

Max. Marks: 60   Duration: 3 Hours

PART A
Answer *all* questions. Each question carries 2 marks.

1. Explain horizontal takeover.

2. Define strategic financial management.

3. Explain the financial statement analysis.

4. Distinguish between forward integration and backward integration.

5. What is uncertainty?

(5x2 marks = 10 marks)

PART B
Answer any *three* questions. Each question carries 10 marks

6. Discuss the sources of information for financial analysis.

7. Explain the features of strategic financial management.

8. Explain investment decisions under risk and uncertainty.

9. A company has capital of Rs. 1000000; its turnover is 3 times the capital and the margin on sales is 6%. What is the return on investment?

10. A machine can reduce annual cost by Rs. 40000. The cost of machine is Rs. 223000 and the useful life is 15 years with zero residual value.

    a) Compute IRR of the machine.
    b) Is it an acceptable investment if cost of capital is 16%?

(3x10 marks = 30 marks)

PART C
Compulsory question. This question carries 20 marks

11. "Merger leads to dilution of EPS". Do you agree? Discuss.

(1x20 = 20 Marks)

Syllabus	
Module 1	**Strategic Financial Management (SFM):** An overview of SFM-features-scope and importance-constraints-strategic planning process-components-benefits-corporate valuation methods.
Module 2	**Risk and Uncertainty:** Types of corporate risk-uncertainty and its sources-investment decisions under risk and uncertainty-techniques of investment decisions-RADR and CE method.
Module 3	**Financial Analysis:** Evolution of financial analysis-objectives-sources of information-traditional and modern approach-tools for financial analysis-trend-ratio-cash flow and fund flow.
Module 4	**Merger Strategy:** Theories of merger-horizontal, vertical and conglomerate mergers-merger procedure-valuation of firm-financial impact of merger-merger and dilution effect on EPS.
Module 5	**Takeover Strategy:** Types of takeovers-negotiated and hostile bids-take over procedures-takeover defences-SEBI regulations with respect to takeovers-distress restructuring strategy-sell offs-spin offs.

Text Books

1. Jakhotiya G. P. (2000). Strategic Financial Management, Vikas Publishing House, New Delhi.
2. Girish P. Jakhotiya (2011). Strategic Financial Management, Vikas Publishing House, New Delhi.
3. George Foster (1986). Financial Statement Analysis, Pearson Publication.
4. Prasad G. Godbol (2013). Mergers, Acquisitions, Principles & Corporate restructuring, Vikas Publishing House.
5. Vanhorne & James C. (2002). Financial Management and Policy, Pearson, New Delhi
6. Brighham & Ehrhardt (2013). Financial Management, Thomson Press (India).

Reference Books

1. Pandey I. M. (2015). Financial Management, Vikas Publishing House, New Delhi
2. Rajni Sofat & Preeti Hiro (2015). Strategic Financial Management, Prentice Hall India, New Delhi.
3. Prasanna Chandra (2017). Financial Management, Tata McGraw Hill, New Delhi.
4. Fred Weston J & Samuel Weaver (2004)., Mergers & Acquisitions, McGraw Hill Publications.
5. Suvendu Narayan Roy (2013). Financial Management with new Approach, Excel Books.
6. Hampton (2003). Financial Decision Making: Concepts, Problems and Cases, Prentice Hall India, New Delhi.

Course Content and Lecture Schedule

No.	Topic	No. of Lectures
1	**Strategic Financial Management (SFM)**	
1.1	An overview of SFM, features, scope and importance.	2 Hours
1.2	Constraints, strategic planning process, components and benefits	2 Hours
1.3	Corporate valuation methods.	3 Hours
2	**Risk and Uncertainty**	
2.1	Types of corporate risk, uncertainty and its sources.	2 Hours
2.2	Investment decisions under risk and uncertainty.	2 Hours
2.3	Techniques of investment decisions, RADR and CE method.	3 Hours
3	**Financial Analysis**	
3.1	Evolution and objectives of financial analysis	1 Hours
3.2	Sources of information for financial analysis.	1 Hours
3.3	Traditional and modern approach, tools for financial analysis-trend, ratios, cash flow and fund flow.	5 Hours
4	**Merger Strategy**	
4.1	Theories of merger, horizontal, vertical and conglomerate mergers.	2 Hours
4.2	Merger procedure and valuation of firm	2 Hours
4.3	Financial impact of merger, merger and dilution effect on EPS.	3 Hours
5	**Takeover Strategy**	
5.1	Types of takeovers, negotiated and hostile bids, take over procedures	2 Hours
5.2	Takeover defences, SEBI regulations with respect to takeovers	3 Hours
5.3	Distress restructuring strategy, sell offs, spin offs.	3 Hours
	Total	36 Hours

Course Code	Course Name	Category	L	T	P	Credit
20MBA240	INSURANCE MANAGEMENT	Elective	3	0	0	3

Preamble: This course intends to provide a basic understanding of the insurance mechanism. It explains the concept of insurance and how it is used to cover risk. Insurance transaction as a business and its markets are explained. The relationship between insurers and their customers and the importance of insurance contracts are discussed.

Prerequisite: NIL

Course Outcomes (COs): After the completion of the course the student will be able to:-

CO 1	Recall the concepts pertaining to Life Insurance and General insurance.
CO 2	Illustrate the key elements of the Life Insurance Products and Services.
CO 3	Design the life insurance cover strategy for clients.
CO 4	Compare and contrast insurance plans; Analyze and use risk management techniques
CO 5	Facilitate the compliance required for acquiring the policy and settlement of claims.

Mapping of course outcomes with program outcomes

	PO 1	PO 2	PO 3	PO 4	PO 5
CO 1	3	2	1	3	3
CO 2	3	3	1	3	2
CO 3	3	3	1	3	3
CO 4	3	3	1	3	2
CO 5	3	3	1	3	1

Assessment Pattern

Bloom's Category	Continuous Assessment Tests (in %)		End Semester Examination (in marks)
	1	2	
Remember	20	20	10
Understand	40	40	30
Apply	40	40	20
Analyze			
Evaluate	Can be done through Assignments/ Seminars/Mini Projects		
Create	Can be done through Assignments/ Seminars/Mini Projects		

Mark distribution

Total Marks	CIE	ESE	ESE Duration
100	40	60	3 hours

Continuous Internal Evaluation Pattern:

Attendance : 4 marks

Continuous Assessment Test (2 numbers) : 16 marks

Assignment/Quiz/Course project : 10 marks

Seminar and Discussion : 10 marks

End Semester Examination Pattern:

There will be three parts; Part A, Part B and part C. Part A contains 5 questions (one question each from each module) of 2 marks each (Students should answer all questions). Part B contains 5 questions (one question each from each module) of 10 marks each (Students have the choice of answering any three questions). Part C contains a compulsory question (can have sub-divisions) of 20 marks (from any of the modules or combination) may be in application-level or case study.

Model Question paper

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
FOURTH SEMESTER MBA DEGREE EXAMINATION

20MBA240 - INSURANCE MANAGEMENT

Max. Marks: 60   Duration: 3 Hours

PART A
Answer *all* questions. Each question carries 2 marks.

1. Define Insurance?

2. What is ULIP?

3. Distinguish between Insurer and Insured?

4. List out two insurance intermediaries?

5. What is Risk Management?

(5x2 marks = 10 marks)

PART B
Answer any *three* questions. Each question carries 10 marks

6. Explain the role of insurance in economic development and social security?

7. What is IRDA? List out the functions of IRDA?

8. How is IT used in insurance sector? Explain?

9. Illustrate about marketing of Insurance relating to current scenario?

10. What is TPA? Explain the role of TPA in Insurance Management?

(3x10 marks = 30 marks)

PART C
Compulsory question. This question carries 20 marks

11. What is the impact of COVID 19 in the insurance Industry? Explain with examples?

(1x20 marks =20marks)

Syllabus	
	Syllabus
Module 1	Insurance and its Evolution: Nature of insurance –insurance operations today - role of insurance in economic development and social security –contribution of insurance to the society –different classes of insurance – importance of insurance – unexpected eventualities in insurance. Types of insurance. Indian Insurance Environment.
	Life Insurance - Introduction: History and evolution, Functions of Insurance, Advantages of Life insurance, Terminologies in Life Insurance. General Insurance: History and evolution, How General insurance works, Advantages of General insurance, Principles of Insurance, Insurable interest, Subrogation and Contribution, Types of General Insurance, General Insurance Products in India, Specialized Insurances i.e., Oil & Energy Risks insurance – Satellite insurance.
Module 2	Risk Management Techniques: Risk avoidance - Risk retention - Risk reduction and control - Risk financing, Difference between Insurance and Assurance, Roll of the actuary. Different types of risks – actual and consequential losses – management of risks – loss minimization techniques-Management of risk by individuals –management of risk by insurers – fixing of premiums. Reinsurance: foundation of reinsurance – forms of reinsurance.
Module 3	Legal Aspects of Insurance- The Insurance Contract: Terms of an insurance contract – principles that form the foundation of insurance – significance of the principles of - utmost good faith- insurable- Interest - indemnity – subrogation – Contribution – disclosure of all relevant information –The relevance of proximate cause – the insurance contract. The Insurance Regulatory Development Authority (IRDA) Act, 1999 – IRDA (Investment) Regulations 2000 – IRDA Guidelines for Insurance Brokers Securities and Exchange Board of India (SEBI) Act, 1992 – SEBI Guidelines.
Module 4	The various constituents of the insurance market: Operations of insurance companies - operations of intermediaries – specialist Insurance companies insurance specialists – Marketing of General Insurance-Life Insurance Marketing- Channels of Sales. Management of insurance companies, challenges of globalisation and business process re-engineering; Methodology of outsourcing. Application of IT in insurance business, system controls, application of ERP for insurance companies, Customer relation-management.
Module 5	Claims Procedure: Meaning of claim and Importance of settling claims, limitations or notice of loss, Claims Settlement process, Investigation and assessment – Surveyors and loss assessors – Claim forms – Loss assessment and claim settlement - Important Aspects in an insurance claims – categories of claim – Discharge vouchers – Post settlement action – Selvage – Recoveries – Disputes related to claims – Other disputes resolution mechanisms. Grievance Redressal Mechanism: Consumer courts, Ombudsman - Integrated Grievance Management System (IGMS) - The Insurance Ombudsman.
Text Books	

1. Neelam Gulati (2009). *Principles of Insurance Management*, Excel Books India.
2. Mishra S.N., Mishra S.B. (2016). *Insurance, Principles and Practice 22ⁿᵈ Edition*, S Chand & Company Pvt. Ltd.
3. George E. Rejda (2011). *Principles of Risk Management and Insurance*. Pearson Publishers.

Reference Books

1. Study material published by Insurance Institute of India – *IC 34 – General Insurance*.
2. Study material published by Insurance Institute of India – *IC 45 - General Insurance Underwriting*
3. D. C. Srivastava, Shashank Srivastava (2001). *Indian Insurance Industry: Transition and Prospects*. New Century Publications, New Delhi.
4. *Principles and Practice of General Insurance*, The Institute of Chartered Accountants of India: New Delhi.

Course Contents and Lecture Schedule

No	Topic	No. of Lectures
1	**Insurance and its Evolution**	
1.1	Insurance operation today	2 Hours
1.2	Life Insurance	2 Hours
1.3	General Insurance	3 Hours
2	**Risk Management Techniques**	
2.1	Risk avoidance	2 Hours
2.2	Management of risk	2 Hours
2.3	Re-insurance	3 Hours
3	**Legal Aspects of Insurance**	
3.1	Insurance Contract	2 Hours
3.2	Principles that form the foundation of insurance	2 Hours
3.3	IRDA	3 Hours
4	**The various constituents of the insurance market:**	
4.1	Operations of insurance companies	2 Hours
4.2	Marketing of insurance	2 Hours
4.3	Application of IT and ERP in insurance Companies	3 Hours
5	**Claim Procedure**	
5.1	Meaning of claim and Importance of settling claims	2 Hours
5.2	Claims Settlement process	3 Hours
5.3	Grievance Redressal Mechanism:	3 Hours
	Total	36 Hours

Course Code	Course Name	Category	L	T	P	Credit
20MBA242	**FINANCIAL APPLICATIONS FOR MACHINE LEARNING**	**Elective**	**3**	**0**	**0**	**3**

Preamble: The course introduces the students to the ever-expanding domain of Machine Learning. The application of machine learning for finance will give the students the much needed skills repertoire to excel in the fast changing financial services sector. The course equips students to apply the different machine learning techniques in different areas of Finance like stock price prediction, investor segmentation, algorithmic trading derivatives pricing, portfolio management, prediction of Loan defaults etc.

Prerequisite: NIL

Course Outcomes: After the completion of the course the student will be able to:

CO 1	Explain the importance of Machine Learning in taking robust Business Decisions.
CO 2	Analyse the Supervised Machine Learning techniques.
CO 3	Appraise the Unsupervised Machine Learning techniques.
CO 4	Evaluate the Reinforced Machine Learning techniques.
CO 5	Evaluate the application of Machine Learning techniques for various financial applications.

Mapping of course outcomes with program outcomes

	PO 1	PO 2	PO 3	PO 4	PO 5
CO 1	3	1	1	2	1
CO 2	-	-	-	1	-
CO 3	-	-	-	1	-
CO 4	-	-	-	1	-
CO 5	2	1	1	2	2

Assessment Pattern

Bloom's Category	Continuous Assessment Tests (in %)		End Semester Examination (in marks)
	1	**2**	
Remember	20	20	10
Understand	40	40	30
Apply	40	40	20
Analyze			
Evaluate	Can be done through Assignments/ Seminars/Mini Projects		
Create	Can be done through Assignments/ Seminars/Mini Projects		

Mark distribution

Total Marks	CIE	ESE	ESE Duration
100	40	60	3 hours

Continuous Internal Evaluation Pattern:

Attendance   : 4 marks

Continuous Assessment Test (2 numbers)   : 16 marks

Assignment/Quiz/Course project   : 10 marks

Seminar and Discussion   : 10 marks

End Semester Examination Pattern:

There will be three parts; Part A, Part B and part C. Part A contains 5 questions (one question each from each module) of 2 marks each (Students should answer all questions). Part B contains 5 questions (one question each from each module) of 10 marks each (Students have the choice of answering any three questions). Part C contains a compulsory question (can have sub-divisions) of 20 marks (from any of the modules or combination) may be in application-level or case study.

Model Question paper
APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
FOURTH SEMESTER MBA DEGREE EXAMINATION

20MBA242 FINANCIAL APPLICATIONS FOR MACHINE LEARNING

Max. Marks: 60   Duration: 3 Hours

PART A
Answer *all* questions. Each question carries 2 marks.

1. List out any four python packages for Machine Learning
2. What is Bagging in Machine Learning?
3. Should we remove highly correlated variables before doing a Principal Component Analysis. Why?
4. What is Latent Semantic Indexing
5. What is reinforced learning in Sentiment Analysis?

(5x2 marks = 10 marks)

PART B
Answer any *three* questions. Each question carries 10 marks

6. Categorize the three major approaches to Machine Learning. Identify a financial application for each approach.
7. What types of problems can be solved using decision trees? Elaborate on the issues in Decision Tree Learning and how they could be overcome.
8. List the steps involved in the K-means algorithm. What are the inputs to the K-means algorithm, which are the user specified parameters and what does the algorithm estimate?
9. Define reinforced learning. Explain the formulation using the Markov Decision Process.
10. Elaborate on the data set required and the steps involved to build a logistic regression-based model that can predict the probability of education loan default.

(3x10 marks = 30 marks)

PART C
Compulsory Question. This question carries 20 marks

11. A credit card company engages an IT application development firm to deploy a new software application for assessing credit worthiness of its customers. The new system is expected to use an artificial neural network to decide if a new credit card applicant can be given a credit card or not. Suggest

    a) Identify the data that the bank should have before the system can be used & why? (4)

    b) Discuss the problem of local minima and how can it be reduced in your dataset. Why do they represent a problem for training the neural network? (4)

    c) Draw a three-layer Back Proposition Network and describe the steps of the Back Propagation algorithm (8)

d) Categorize the advantages and disadvantages in using the Back Propagation Algorithm (4)

Syllabus	
Module 1	**Introduction**: Intelligent Machines. Need, Motivation, Rationale. Difference between Artificial Intelligence, Machine Learning, Deep Learning, Data Science. Types of Machine Learning. Developing a Machine learning Model in Python - Python Packages for Machine Learning.
Module 2	**Supervised Learning:** Types: Linear Regression, Regularised Regression, Logistic Regression, Decision trees, K Nearest Neighbours, Support Vector Machine, Linear Discriminant Analysis, Random Forest Method, Ensemble Models, Time Series Models. Model Performance – Overfitting, Underfitting, Cross Validation, Evaluation Metrics. Factors for Model Selection.
Module 3	**Unsupervised Learning:** Dimensionality Reduction – Techniques: Principal Component Analysis (PCA), Kernel PCA, t-distributed Stochastic Neighbour Embedding. Clustering – Techniques: k-Means Clustering, Hierarchical Clustering, Affinity Propagation Clustering.
Module 4	**Reinforcement Learning:** Key Components, Modelling Framework: Bellman Equations, Markov Decision Process, Temporal Difference learning, Artificial Neural Networks. Learning Models: Model based, Model free: value based, policy based. Natural Language Processing – Preprocessing, Feature Representation, Inference.
Module 5	**Applications for Finance:** Prediction of Stock Price, Derivative Pricing, Fraud Detection, Loan Default Probability, Portfolio Management, RL based portfolio allocation, Trading Strategy based on Sentiment Analysis, Chatbot Digital Assistant.

Text Book

1. Hariom Tatsat, Sahil Puri, Brad Lookabaugh (2020). *Machine Learning and Data Science Blue Prints for Finance,* First Edition, OReilly Media.
2. Gopal M., (2018). *Applied Machine Learning,* First Edition, Macgraw Hill Edition (India) Private Limited.

References and Suggested Readings

1. Mathew F. Dixon, Igor Halperin, Paul Bilokon (2020). *Machine Learning in Finance, First Edition*, Springer.
2. Puneet Mathur (2019). *Machine Learning Applications using Python*, First Edition, Apress
3. Jannes Klaas (2019). *Machine Learning for Finance: Principles and practice for financial insiders*, First Edition, Packt Publishing.
4. Marcos M. Lopez de Prado (2020). *Machine Learning for Asset Managers,* First Edition, Cambridge University Press.
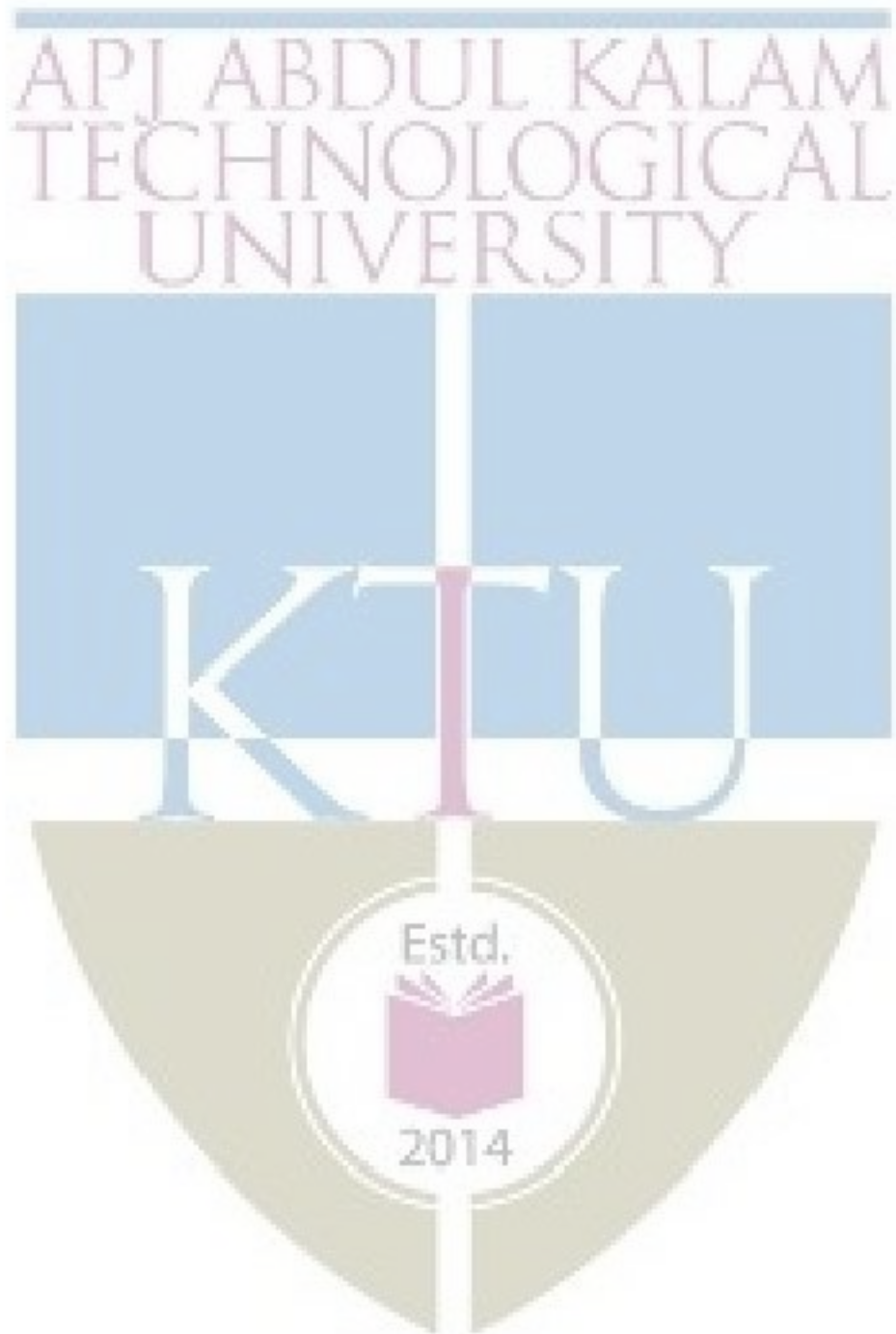
Course Contents and Lecture Schedule

No		Topic	No. of Lectures
1		**INTRODUCTION**	
	1.1	Artificial Intelligence, Machine Learning, Deep Learning, Data Science	3 Hours
	1.2	Types of Machine Learning	2 Hours
	1.3	Machine Learning Model in Python	3 Hours
2		**SUPERVISED LEARNING**	
	2.1	Regression Based Models	3 Hours
	2.2	Classification Based Models	2 Hours
	2.3	Model Performance and Model Selection	2 Hours
3		**UNSUPERVISED LEARNING**	
	3.1	Principal Component Analysis (PCA)	2 Hours
	3.2	Kernel PCA, t-distributed Stochastic Neighbour	3 Hours
	3.3	Clustering Techniques	2 Hours
4		**REINFORCEMENT LEARNING**	
	4.1	Key Components, Modelling Framework	3 Hours
	4.2	Learning Models	3 Hours
	4.3	Natural Language Processing	2 Hours
5		**APPLICATIONS FOR FINANCE**	
	5.1	Cases of Supervised Learning	2 Hours
	5.2	Cases of Unsupervised Learning	2 Hours
	5.3	Cases of Reinforcement Learning	2 Hours
		Total	36 Hours