INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad -500 043

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTOR

Course Title	**FINANCIAL DERIVATIVES**			
Course Code	**CMBB58**			
Programme	MBA			
Semester	IV			
Course Type	**Professional Elective - VIII**			
Regulation	IARE - R18			
Course Structure	**Lectures**	**Tutorials**	**Practical Work**	**Credits**
	4	-	-	4
Chief Coordinator	Ms. S Shireesha, Assistant Professor, MBA			
Course Faculty	Ms. S Shireesha, Assistant Professor, MBA			

I. COURSE OVERVIEW:

The objective of this course is to make students efficient in the area of Derivatives, such as Forwards, Future Markets, Swaps and Option Strategies. It give understanding about the derivatives in stock, commodity and Forex markets with changes in interest rates, exchange rates, stock prices, commodity prices, inflation, weather, etc.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
PG	CMB404	III	Security Analysis and Portfolio Management

III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Financial Derivatives	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✔	Chalk & Talk	✘	Quiz	✔	Assignments	✘	MOOCs
✔	LCD / PPT	✔	Seminars	✘	Mini Project	✔	Videos
✘	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE): The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into five units and each unit carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with "either" or "choice" will be drawn from each unit. Each question carries 14 marks. There could be a maximum of two sub divisions in a question.

The emphasis on the questions is broadly based on the following criteria:

50 %	To test the objectiveness of the concept.
50 %	To test the analytical skill of the concept OR to test the application skill of the concept.

Continuous Internal Assessment (CIA):
CIA is conducted for a total of 30 marks (Table 1), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 1: Assessment pattern for CIA

Component	**Theory**		**Total Marks**
Type of Assessment	CIE Exam	AAT	
CIA Marks	25	05	30

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively. The CIE exam is conducted for 25 marks of 2 hours duration consisting of two parts. Part–A shall have five compulsory questions of one mark each. In part–B, four out of five questions have to be answered where, each question carries 5 marks. Marks are awarded by taking average of marks scored in two CIE exams.

Alternative Assessment Tool (AAT):

Marks shall be awarded considering the average of two AAT for every course. The AAT may include seminars, assignments, term paper, open ended experiments, five minutes video and MOOCs.

VI. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes (POs)		**Strength**	**Proficiency assessed by**
PO1	**Managerial skills:** Apply knowledge of management theories and practices to solve business problems.	1	Assignments.
PO2	**Decision making skills:** An ability to analyze a problem identifies, formulate and use the appropriate managerial skills for obtaining its solution.	3	Seminars
PO4	**Communication skills:** Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.	1	Seminars
PO6	**Entrepreneurial and Innovation Skills:** Demonstrate the skills in evaluating business opportunity and identifying	2	Assignments

Program Outcomes (POs)		Strength	Proficiency assessed by
	sources of potential funding, and develop as successful entrepreneurs		
PO7	**Strategic Skills:** Analyze and formulate managerial strategies to sustain in dynamic global business environment.	3	Seminars

3 = High; 2 = Medium; 1 = Low

VII. COURSE OBJECTIVES :

The course should enable the students to:	
I	Understand fundamental linkages between spot markets and derivative markets and uses and misuses of derivatives.
II	Apply knowledge about basic option strategies, advanced option strategies, trading with options, hedging with options, currency options.
III	Analyze the commodity futures and options and swaps for the effectiveness of derivative markets
IV	Evaluate the role of swaps in terms of interest rate, currency, commodity, equity index, credit risk and credit.

VIII. COURSE OUTCOMES (COs):

CO Code	CO's	At the end of the course, the student will have the ability to:	PO's Mapped	Strength of Mapping
CMBB58.01	CO 1	Understand the development and growth of derivative markets, types and uses of derivatives.	PO 4	2
CMBB58.02	CO 2	Examine the fundamental linkages between spot and derivatives market and role of derivative market.	PO 2, PO 6	2
CMBB58.03	CO 3	Demonstrate the structure of forward and future markets and know the mechanics of future markets hedging strategies.	PO 7	3
CMBB58.04	CO 4	Elucidate the determination of forward, future prices, interest rates of currency futures and forwards.	PO 2, PO 6	2
CMBB58.05	CO 5	Analyze the concept, structure and principles of option pricing and know the differences between options market and future market.	PO 1	1
CMBB58.06	CO 6	Explain the option pricing models like binomial model, the black model and scholes merton model.	PO 1	2
CMBB58.07	CO 7	Interpret the basic option strategies, advanced option strategies, trading with options and currency options.	PO 7	3
CMBB58.08	CO 8	Ability to gain the knowledge in different types of commodity futures and options.	PO 4	3
CMBB58.09	CO 9	Classify various types of swaps commodity exchanges, multi commodity exchange, national commodity derivatives exchange role, functions and trading.	PO 6	1
CMBB58.10	CO 10	Explain the concept and nature, evolution of swap market and features of swaps.	PO 2	2
CMBB58.11	CO 11	Differentiate major types of swaps like interest rate swaps, equity index swaps, credit risk in swaps credit swaps pricing and valuing swaps.	PO 6	2

3 = High; 2 = Medium; 1 = Low

IX. MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES:

COURSE OUTCOMES	Program Outcome(POs)							
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO 1				2				
CO 2		3				1		
CO 3							3	
CO 4		1				2		
CO 5	1							
CO 6	2							
CO 7							3	
CO 8				3				
CO 9						1		
CO 10		2						
CO 11						2		

3 = High; 2 = Medium; 1 = Low

X. ASSESSMENT METHODOLOGIES – DIRECT

CIE Exams	PO1,PO2, PO4,PO6, PO7	SEE Exams	PO1,PO2, PO4,PO6, PO7	Assignments	PO1,PO6	Seminars	PO2,PO4
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	-						

XI. ASSESSMENT METHODOLOGIES - INDIRECT

√	Assessment of course Outcomes (by feedback, once)	√	Student feedback on faculty (twice)
X	Assessment of mini projects by experts		

XII. SYLLABUS

UNIT-I	INTRODUCTION TO DERIVATIVES
Development and growth of derivative markets, types of derivatives uses of derivatives, fundamental linkages between spot and derivative markets, the role of derivatives market, uses and misuses of derivatives.	
UNIT-II	**FUTURE AND FORWARD MARKET**
Structure of forward and future markets, mechanics of future markets hedging strategies, using futures, determination of forward and future prices, interest rate futures currency futures and forwards.	
UNIT-III	**BASIC OPTION STRATEGIES**
Options, distinguish between options and futures, structure of options market, principles of option pricing. Option pricing models: the binomial model, the black, scholes merton model. Basic option strategies, Advanced option strategies, trading with options, hedging with options, currency options.	

UNIT-IV	COMMODITY MARKET DERIVATIVES
Introduction, types, commodity futures and options, swaps commodity exchanges multi commodity exchange, national commodity derivative exchange role, functions and trading.	
UNIT-V	**SWAPS**
Concept and nature, evolution of swap market, features of swaps, major types of swaps, interest rate swaps, currency swaps, commodity swaps, equity index swaps, credit risk in swaps, credit swaps, using swaps to manage risk, pricing and valuing swaps.	
Text Books:	
1. John C Hull, "Options, Futures and Other Derivatives", Pearson Education, 8th Edition, 2012. 2. Robert A Strong, "Derivatives an Introduction", Thomson, 1st Edition, 2012. 3. Gupta, "Financial Derivatives", PHI, 1st Edition, 2012.	
Reference Books:	
1. Dubofsky, Miller, "Derivatives Valuations and Risk Management", Oxford,1st Edition, 2012 2. Don M. Chance, Robert Brooks, "Derivatives and Risk Management Basic", Cengage Learning, 9th Edition, 2012. 3. Sundaram Das, "Derivatives Principles and Practice", McGraw Hill, 1st Edition, 2012.	

XIII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be covered	Course Outcomes (COs)	Reference
1-2	Development and growth of derivative markets	CO 1	T1: 1.7
3-4	Types of derivatives and uses of derivatives	CO 1	T1: 2.1
5-7	Fundamental linkages between spot & derivative markets	CO 2	T1: 2.8
8-9	The role of derivatives market in the financial system	CO 2	T1: 3.7
10-11	Uses and misuses of derivative market.	CO 1	T1: 3.5
12-14	Structure of forward and future markets	CO 3	T1: 4.1
15-16	Mechanics of future markets in Financial derivatives	CO 3	T1: 5.1
17-18	Hedging or risk free strategies using futures market	CO 3	T1: 5.3
19-21	Determination of forward and future prices	CO 4	T1: 5.3
22-24	Interest rate futures currency futures and forwards.	CO 4	T1:5.3
25-26	Introduction to Options, distinguish between options and futures	CO 5	T1: 6.1
27-30	Structure of options market, principles of option pricing,	CO 5	T1: 5.7
31-34	The binomial model, the black- Scholes Merton model	CO 6	T1: 6.1,
35-36	Basic option strategies, advanced option strategies	CO 7	T2: 7.1
37-38	Trading with options, hedging with options, currency options.	CO 7	T2: 7.3,
39-44	Introduction, types, commodity futures and options	CO 8	T1: 6.1
41-42	Multi commodity exchange role, functions and trading.	CO 8	T2: 8.3,
43	Concept and nature, evolution of swap market and features of swaps	CO 9	T1: 7.1
44-45	Interest rate swaps, currency swaps, commodity swaps, equity index swaps	CO 11	T2: 9.2
46-47	Credit risk in swaps, credit swaps, using swaps to manage risk, pricing and valuing swaps.	CO 10	T2: 9.8

XIII. GAPS IN THE SYLLABUS - TO MEET INDUSTRY / PROFESSION REQUIREMENTS:

S. No	Description	Proposed actions	Relevance with POs
1	Derivatives complicated in many aspects of the accounting, regulating, and statistical reporting of financial transactions.	Seminars	PO 1, PO 2, PO 4
2	Risk management tool for hedging against fluctuations in foreign currency	Guest Lectures	PO 6, PO 7

Prepared by:
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