

**BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE,
PILANI**

Semester-I 2022-23

Course Handout

August 29, 2022

In addition to part -I (General Handout for all courses appended to the time table) this portion gives further specific details regarding the course.

Course No. : ECON F212

Course Title : FUNDAMENTALS OF FINANCE & ACCOUNTING

Instructor-in-charge : Dr. Niranjana Swain

1. Scope and Objective:

This course is an introduction to the reporting system used by businesses to convey financial information to users external to the enterprise and the basics of financial markets and financial management. In the first part of the course, primary emphasis will be on understanding the financial reports that are the end products of the accounting system- what they tell us about a business enterprise. The accounting principles, conventions and concepts underlying financial reporting will be examined with the objective of developing ability to interpret and analyze financial statements. The second part will emphasize the financial markets; financial market reforms; primary and secondary markets; sources of investment information; portfolio selection, preliminary concepts of financial management etc.

Learning Outcomes

No	At the end of the course, the student will be able to;
L01	Interpret, identify, classify elements of the financial accounting transactions and summarise it
L02	Construct classified Balance Sheet, Profit & Loss Account and Cash Flow Statements
L03	Measure, analyze, and evaluate the financial statements and business performance of a firm
L04	Understand behavior of cost and relationship between cost-volume-profits (CVP)

Course Objectives

No	
C01	Demystify the components and elements of the financial statements.
C02	Learn to prepare financial statements from information and interpret transactions.
C03	Explain the tools and techniques of financial statement analysis.
C04	Examine the cost behavior and use of CVP for managerial decision making.
C05	Use capital budgeting techniques to analyse and make capital budgeting decisions.

Text Book

T1	Financial Accounting – A Managerial Perspective, R. Narayanaswamy, PHI, 5 th edition, 2014.
T2	Accounting Text & Cases, Robert Anthony, David Hawkins, Kenneth Merchant, 13 th edition, 2013 (For select cases & Management Accounting)
T3	Bhole, L.M. and Jitendra Mahakud, “Financial Institutions & Markets: Structure, Growth and Innovations” Tata McGraw Hill, 5th edition, 2009

**If you are not able to find a copy of Text Book, feel free to get any one of the three reference books mentioned below.*

Reference Book(s)

R1	P. C. Tulsian, Financial Accounting, Tata McGraw Hill, latest edition
R2	Financial Accounting: A Managerial Emphasis, Ashok Banerjee, Excel Books; 3rd Revised edition, 2009

Course Plan : Study Modules and Learning Outcomes:

Module No	Module Title	Objectives	Learning outcome (You should be able to answer these questions after the module)	No of Sessions
1: Preparation of Financial Statements	Introduction to Accounting	To understand importance of financial and management accounting in business as a source of value creation	Is accounting mere a historic record of transactions or can it create value for business?	3
	Generally Accepted Accounting Principles (GAAP)	To understand underlying principles of financial accounting	What is the philosophy behind record keeping? Are there any guiding principles for transaction recording?	2
	Journal	To learn the process of recording business transactions in first book of entry called 'Journal'	How do they record every small business transaction? Are there any rules? Is there a scientific method for recording transactions?	4
	Ledger	To learn to classify transactions recorded in Journal using 'ledger posting' process	The transactions can differ in type and nature. How do they account for that?	2
	Trial balance	To learn to prepare 'trial balance statement' (using records from ledger) to get a summarize state of business transactions	It must be difficult to go through thousands of transaction records. Can one just have a summary of transactions like a bird's eye view?	2
	Final Accounts	To learn the process of preparation of 'Profit and Loss Account' and 'Balance Sheet' using summary of accounts provided by trial balance	What is the result of all transactions that took place during a year - profit or loss? How much does the business own and how much does it owe?	5
	Cash flows statement	To learn the process of preparation of 'Cash Flow Statement' using data supplied by 'Income Statement' and 'Balance Sheet'	Are you saying profit earned does not equal cash earned? How are these two different? Does that mean there transactions that do not involve cash?	3

2. Financial Statements Analysis and Interpretation	Financial statement Analysis and Interpretations	To learn to examine financial health of business by converting data exhibited in 'Income Statement' and 'Balance Sheet' into useful information	How efficiently is business being run? Is the financial position of business healthy or critical? Is it headed for insolvency? What areas need immediate attention?	5
	Assessing Quality of Financial Reporting	To learn to identify accounting red flags wherein there is scope of noise and bias due to rigidity in accounting rules	How to deal with accounting noise and biases while analysing final health of an organization (How to undo accounting distortions)?	2
3. Cost Concepts and Analysis	Cost Accounting – Measuring and Analysing cost of products and Services	To learn different cost concepts and objectives of cost accounting, analyse cost behaviour, identify various cost drivers and learn to prepare cost sheet.	Taking decisions on cost minimization versus revenue maximization, what is the cost of products and services? How to take make or buy decisions,	2
	Cost-volume-profit analysis	To learn to determine optimal scale of business operations for different profit levels conditional to cost structure of a firm	What is the minimum scale of business that needs to be achieved before it starts making profit? What scale needs to be achieved to earn a target profit level?	1
	Marginal / Differential Costing	To learn to make decisions from alternative choices using management accounting information.	How to decide when faced with short-run alternative choices? What is marginal / differential cost?	1
4	Indian Financial System	To learn and examine the structure of Indian Financial System	Know the concepts and structure of financial system – understand its components, functions and effects .	2
5	Basics of Foreign Exchange Market	To learn concepts and mechanisms of Forex Market, and exchange rate determination	Understand Interest Rate Parity and estimate exchange rate.	2
6	Short-term money markets	To learn structure of short-term money markets, instruments and participants.	Understand effect of short-term money market on financial system.	2
7	Long-term securities markets	To learn long-term securities, markets structure, instruments and participants and basics of Risk & Return.	Understand effect of long-term securities market on financial system.	2
			Total Sessions	40

Content Structure

1. Introduction to Accounting

Why study accounting?

How valuable is the knowledge of financial accounting?

Types of business and information requirement

Financial accounting as an information system for stakeholders in business

What is accounting?

Definition of Accounting and accounting cycle

Introduction to Annual Accounting Statements

Generally Accepted Accounting Principles (GAAP)

Balance Sheet Principles

Money Measurement Concept

Business Entity Concept

Going Concern Concept

Cost Concept

Dual Aspect Concept

Income Statement concepts

Accounting Period Concept

Conservatism Concept

Realization Concept

Matching Concept

Consistency Concept

Materiality Concept

Accounting Equation

Journal

What is journal?

Meaning and format of Journal

Nature of business transactions

Rules of debit and credit

What is debit and credit

Rules of debit and credit for types of accounts using accounting equation

Double entry system

Practice questions – recording transactions in Journal

Ledger Posting

Meaning and format of account – T accounts

How to post journal entries into ledger?

Posting Journal entries into Ledgers

Balancing of accounts and rules

Trial Balance

Format of trial balance

Preparation of trial balance

Errors in preparation of trial balance

Final Accounts

Preparation of final accounts

Components of final accounts

Format and preparation of Income Statement & Balance Sheet

Adjustments for Transactions after closing of accounts

Outstanding or accrued expenses

Prepaid Expenses

Fixed asset purchase/sale, Depreciation and profit/loss on sale of fixed assets

Bad debts, provision for bad and doubtful debts

Income received in advance

Provision of taxation, dividends

Cash flow statement

Introduction to Cash flow statement

Need for cash flow statement

- Types of cash flows
- Format of Cash flow statement

- Calculation of cash from operating activities
 - Why accounting profit is not cash profit
 - How to calculate operating cash profit from accounting profit
 - Format - Calculation of cash from operating activities
 - Example problem -calculating cash flows from operating activities
- Calculation of cash from investing activities
 - Format - Calculation of cash from investing activities & Example problem
- Calculation of cash from financing activities
 - Format - Calculation of cash from financing activities & Example

2. Financial Statements Analysis and Interpretation: Ratio Analysis

- Introduction to Ratio Analysis
 - Introduction to financial ratio analysis
 - Meaning and classification of ratios
- Liquidity ratios
 - About liquidity ratios
 - Current ratio
 - Quick ratio
 - Absolute liquid ratio
- Solvency ratios
 - About solvency ratios
 - Debt-equity ratio
 - Proprietary ratio
 - Gearing ratio
 - Interest coverage ratio
- Profitability ratios
 - Gross profit ratio, Operating ratio, operating profit ratio, net profit ratio, Calculation of above ratios
 - ROI, ROCE, EPS, DPR, DYR, PER
- Turnover ratios
 - Introduction to turnover ratios
 - STR
 - DTR and ACP
 - CTR and APP
 - Working capital turnover ratio
 - Fixed asset turnover ratio
- Practice problems
 - Calculation of the above ratios
 - Preparation of Financial Statement using Ratios
- Assessing Quality of Financial Reporting
 - Cost and benefits of Generally Accepted Accounting Principles (GAAP)
 - Factors influencing accounting reporting quality
 - Evaluating Accounting Strategies
 - Accounting Red Flags

3. Cost Accounting – Measuring and Analyzing cost of products and Services

- What is cost and Why Cost Accounting
- Types and behavior of various cost
- Scope of cost accounting
 - Advantages of cost accounting
- Cost Pyramid symptoms
 - Preparation of cost sheet
- Cost volume profit analysis
 - Introduction to Cost Volume Profit Analysis
 - Need for CVP analysis

Algebra of CVP analysis
Graphical representation
Practice questions
Marginal/ Differential Cost
Introduction to marginal/ differential costs
Alternative Choice problems

4. Indian Financial System:
An overview of the post-1950 period,
Banking Structure-RBI and Commercial Bank,
Inflation, Interest Rate and Exchange Rate,
Monetary & Credit Policy,
Repo & Reverse Repo Rate, CRR & SLR.
5. Basics of Foreign Exchange Market
PPP, LOOP and IRP,
Direct Quote vs. Indirect Quote
6. An Overview of Markets-
Call Money, T-Bills, Commercial Papers, Certificate of Deposits.
7. Introduction to Securities, markets & analysis, Risk & Return – Concepts, Interest
Term Structure – YTM and Time Value of Money

Detailed Takeaway from Accounting Module:

Introduction to Accounting - Types and significance:

- Accounting is essential if an organization wants to grow its business in a way that can be measured and predicted. Having a system of tracking business' assets, liabilities, and income lets organization to make smart, informed business decisions based on the past performance and present financial health of your company. In view of this, students will be able to understand the concept and types of accounting and their relevance both from internal and external stakeholders' perspectives.

Accounting Rules and Concepts - Rationale:

- The accounting concepts and principles are important for accountants, as they need to abide by them every time they involve in analyzing, recording, summarizing, reporting and interpreting financial transactions of a business. ... GAAP is based on the core following principles. In this module, students will be able to appreciate rationale behind accounting concepts and in absence what could be potential distortion in financial reporting practices.

Recording transactions and preparing financial statements:

- The financial reporting focuses on the role of financial accounting principles and processes in creating and reporting an organization's financial statements. In this module, students will be able to use financial accounting principles to create and/or process an organization's financial statements and understand how and why transactions are recorded and reported. Hence, students will have appreciation of impact of financial reporting on financial statements.

Financial Reporting and Analysis: Inventories and Long-lived Assets

Assets generate revenue and involve cost (fixed and variable). Operating efficiency of an organization depends on how effectively assets (resources) are utilized. **Studying inventories will enable students to:**

- distinguish between costs included in inventories and costs recognized as expenses in the period in which they are incurred;
- describe different inventory valuation methods (cost formulas);

- calculate and compare cost of sales, gross profit, and ending inventory using different inventory valuation methods and using perpetual and periodic inventory systems;
- calculate and explain how inflation and deflation of inventory costs affect the financial statements and ratios of companies that use different inventory valuation methods;
- explain LIFO reserve and LIFO liquidation and their effects on financial statements and ratios; f convert a company's reported financial statements from LIFO to FIFO for purposes of comparison;
- describe the measurement of inventory at the lower of cost and net realizable value;
- describe implications of valuing inventory at net realizable value for financial statements and ratios;
- describe the financial statement presentation of and disclosures relating to inventories;
- explain issues that analysts should consider when examining a company's inventory disclosures and other sources of information;
- calculate and compare ratios of companies, including companies that use different inventory methods;
- analyze and compare the financial statements of companies, including companies that use different inventory methods.

Studying long-lived assets, students should be able to:

- distinguish between costs that are capitalized and costs that are expensed in the period in which they are incurred;
- compare the financial reporting of the following types of intangible assets: purchased, internally developed, acquired in a business combination;
- explain and evaluate how capitalizing versus expensing costs in the period in which they are incurred affects financial statements and ratios;
- describe the different depreciation methods for property, plant, and equipment and calculate depreciation expense;
- describe how the choice of depreciation method and assumptions concerning useful life and residual value affect depreciation expense, financial statements, and ratios;
- describe the different amortization methods for intangible assets with finite lives and calculate amortization expense;
- describe how the choice of amortization method and assumptions concerning useful life and residual value affect amortization expense, financial statements, and ratios;
- describe the revaluation model;
- explain the impairment of property, plant, and equipment and intangible assets;
- explain the derecognition of property, plant, and equipment and intangible assets;
- explain and evaluate how impairment, revaluation, and derecognition of property, plant, and equipment and intangible assets affect financial statements and ratios;
- describe the financial statement presentation of and disclosures relating to property, plant, and equipment and intangible assets;
- analyze and interpret financial statement disclosures regarding property, plant, and equipment and intangible assets;
- compare the financial reporting of investment property with that of property, plant, and equipment;
- explain and evaluate how leasing rather than purchasing assets affects financial statements and ratios;
- explain and evaluate how finance leases and operating leases affect financial statements and ratios from the perspective of both the lessor and the lessee.

Evaluating Quality of Financial Reports: This module will enable students to:

- understand the use of a conceptual framework for assessing the quality of a company's reports;
- understand potential problems that affect the quality of financial reports;
- describe and understand how to evaluate the quality of a company's financial reports;
- describe indicators of earnings quality and explaining mean reversion in earnings and how the accruals component of earnings affects the speed of mean reversion;
- evaluate the earnings quality of a company and describe indicators of cash flow quality; and

- describe indicators of quality of cash flow and balance sheet, and evaluate the cash flow and balance sheet quality of a company;

Cost Analysis for Performance Improvement: This module will equip students to

- understand various cost concepts and their significance;
- appreciate the significance of various functions/departments;
- understand how different activities drive cost across of an organisation; and
- identify and measure the cost of doing various activities.

Financial Statement Analysis: This module will enable students to:

- read and understand the financial statement viz. balance sheet, income statement and statement of funds flows of your company;
- redesign the income statement for better analysis and management reporting purpose;
- appreciate the importance of book profit and net operating cash flow in today's business i.e. liquidity versus profitability;
- understand and analyse the impact of accounts receivables on working capital requirement.
- analyse financial performance and position of an organization, do comparative and industry analysis using various financial and non-financial ratios.

Detailed Takeaway from Finance Module:

Indian Financial System:

- Reserve Bank of Indian (RBI) and its functions; Monetary and Credit policies in India; Repo rates and reverse repo rates.
- Structure of the indigenous Indian banking system; Household sector dominance in the aggregate savings; Cash credit and overdrafts.
- The structure of the Indian commercial banking system and Evolution of Non-Bank Financial Intermediaries in India.
- Reasons for the expansion of the debt market in India; SEBI and its role in the Indian capital market development; Evolution of the Indian capital (Primary and secondary) market.
- Evolution and performance of Small Savings, Provident Fund and Pension Funds, Insurance. Companies, UTI and Mutual Funds in India.
- Inter-bank call market and development of the call money market in India; Call rate in India; Call rate vs bank rate and Reasons of call rate volatility.
- Nature and characteristics of the Treasury (such as 91, 182 and 364 days) Bills in India; Limitations of the Indian Treasury Bill market.
- Evolution of the Indian Commercial Bill Markets and characteristics of a well-developed Bill Markets; Factors behind the underdevelopment of the Bills markets in India.
- Evolution, development and performance of the Indian Commercial Paper (CPs) and Certificate of Deposits (CDs); Commercial Paper (CPs) and Certificate of Deposits (CDs) markets: Size and interest rates; RBI initiatives to further develop the Commercial Paper (CPs) and Certificate of Deposits (CDs) markets in India.
- Structure of the Indian foreign exchange market; Risk management (Tools) in the Indian foreign exchange market; Foreign exchange market efficiency, exchange rate determinants and types of the exchange rates; Devaluation, depreciation, and appreciation of the currency; Currency convertibility and its prerequisites and the dangers of currency convertibility.
- Foreign Exchange Reserve Management in India; Capital Account Convertibility and its implications on Indian Economy.

Experiential Learning Components (ELC):

A group of five students (course participants) will select three organizations from one industry category and submit participants and organizations details (Participant's Name, ID No, Contact Number, Email ID and Contact Number, Name of the organizations) on January 30, 2022. Selected organizations must be listed on stock exchange and widely traded and annual reports are available for at least 5 years ending March 31, 2021. Each group will do all assignments on selected organizations - apply concepts discussed in class and do financial statements analysis and interpretation (Financial Statement Analysis and Interpretation of three

organizations – Trend, Comparative and Industry Analysis). At the end of assignments, group will write a business case. This will enable participants to have an integrated understanding application of theories and concepts in real business case.

4. Evaluation Scheme:

Component	Duration	Weightage	Date & Time	Nature of Component
Quizzes	5 to 10 minutes	20		Unannounced
Assignment (Experiential Learning)		20		Group Assignment (Open Book)
Mid Sem Test	90 Minutes	20	04/11 1.30 - 3.00PM	CB
Comprehensive Examination	3 Hours	40	28/12 FN	CB

5. Chamber Consultation Hour: With prior appointment (TBA).

6. Notices: Notices concerning the course will be displayed on Econ/fin **or** on LTC notice boards.

7. Academic Honesty and Integrity Policy: Academic honesty and integrity are to be maintained by all the students throughout the semester and no type of academic dishonesty is acceptable.

8.

Assignment

Details will be communicated

**Instructor In-Charge
ECON F212**