INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

CIVIL ENGINEERING

ASSIGNMENT

Course Name	:	**MANAGERIAL ECONOMICS AND FINANCIAL ANALYSIS**
Course Code	:	A30010
Class	:	III B.Tech I Semester
Branch	:	CIVIL ENGINEERING
Year	:	2016 – 2017
Course Coordinator	:	Dr.J.S.V.Gopala Sarma
Course Faculty	:	Dr.J.S.V.Gopala Sarma

OBJECTIVES

The objective of the course is to impart knowledge and abilities to the students to:

I. To understand the concepts of managerial economics and financial analysis this helps in optimal Decision making in business environment.

II. To be familiar with demand concepts, types of methods or techniques of demand those are used by the entrepreneur or producer.

III. To have a thorough knowledge on the production theories and cost while dealing with the production and factors of production.

IV. To introduce the concepts of cost and significance, limitation of Break even analysis.

V. An ability to study the various pricing methods which are adopted in attracting the potential Customers for the different commodities.

VI. To acquaint the significance of the project management, capital budgeting, estimation of the projects through capital budgeting methods for choosing the best and optimal projects.

VII. To provide the optimal decisions acquiring the knowledge on financial accounting and management Accounting.

S. No	Question	Blooms Taxonomy Level	Course Outcome
	ASSIGNMENT NO.1 **UNIT-I** **INTRODUCTION & DEMAND ANALYSIS**		
1	Define Managerial Economics. Explain its nature and scope of Managerial Economics.	Remember	1
2	Define Law of Demand. State the assumptions and Exceptions of Law of Demand.	Remember	2
3	Describe the determinants of Demand.	Understand	2
4	Explain the significance/Importance of Elasticity of Demand.	Remember	2
5	Illustrate different types of Elasticity of Demand.	Apply	2
6	Identify the factors which are influencing/governing Elasticity of Demand.	Analyze	2
	UNIT-II **PRODUCTION & COST ANALYSIS**		
1	Describe different types of Internal Economies.	Understand	3
2	Briefly explain different types of External Economies.	Remember	3

S. No	Question	Blooms Taxonomy Level	Course Outcome
3	Discuss the significance and limitations of Break-Even Analysis.	Understand	3
4	Briefly Explain the classification of costs	Understand	3
5	You are required to Determine i)P/V Ratio (ii) Break Even Point in Value (iii) Sales required to earn a profit of Rs.4,50,000 and (iv) Profit when Sales are Rs.21,60,000 from the following information Fixed Expenditure Rs.90,000 <u>Variable Cost Per unit :</u> Direct Material Rs.5 Direct Labour Rs.2 Direct Overheads 100% of Direct Labour Selling price per unit Rs.12.	Apply	3
6	The following data are available from the records of a company Sales Rs.60,000 Variable cost Rs.30,000 Fixed Cost RS.15,000 You are required to i) Compute the P/V Ratio, Break-Even Point and Margin of Safety at this level. ii) Compute the above with the effect of 10% increase in selling price. iii) Compute the above with the effect of 10% decrease in selling price.	Understand	3
7	The Sales Turnover and profit during two years were given as follows: **Years** **2003** **2004** Sales (Rs.) 1,00,000 1,20,000 Profit (Rs.) 15,000 23,000 You are required to Compute the following: i)P/V Ratio ii) Fixed Cost iii) Break Even Point (Value) ii) Sales required to earn a profit of Rs.20,000 iii) Profit when Sales are Rs.1,25,000.	Understand	3
	UNIT-III **MARKETS & NEW ECONOMIC ENVIRONMENT**		
1	Define Perfect Competition. List out the features of Perfect Competition?	Remember	4
2	Define Monopoly. Discuss the features of Monopoly?	Understand	4
3	How to determine price under Perfect Competition? Illustrate.	Apply	4
4	Discuss price-output determination in case of Monopoly.	Understand	4
5	How to determine price- output in case of Monopolistic Competition? Discuss.	Apply	4
	ASSIGNMENT NO.2 **UNIT-III** **MARKETS & NEW ECONOMIC ENVIRONMENT**		
1	Define Business. Explain its characteristics.	Remember	5
2	Define Sole Trading. Describe the features, merits and demerits of Sole Trading?	Understand	5
3	Define Partnership. State the features, merits and demerits of Partnership?	Remember	5
4	Define Joint Stock Company. Illustrate the features, merits and demerits of Joint Stock Company.	Apply	5
5	Distinguish between public company and private company.	Apply	5
	UNIT-IV **CAPITAL BUDGETING**		
1	Define Capital. Explain its significance.	Remember	6
2	Describe different types of capital.	Create	6

<table>
<tr><th>S. No</th><th>Question</th><th>Blooms Taxonomy Level</th><th>Course Outcome</th></tr>
<tr><td>3</td><td>Discuss the factors which are influenced on working capital requirement.</td><td>Understand</td><td>6</td></tr>
<tr><td>4</td><td>Define Capital Budgeting. Illustrate the significance and limitations of Capital Budgeting.</td><td>Apply</td><td>6</td></tr>
<tr><td>5</td><td>The cost of a project is Rs.50,000 and annual cash inflows for the next five years are given as follows:
1st year Rs.25,000
2nd year Rs.25,000
3rd year Rs.25,000
4th year Rs.25,000
5th year Rs.25,000
Total 125,000
What is the pay-back period for the project?</td><td>Remember</td><td>6</td></tr>
<tr><td>6</td><td>A firm is considering two projects each with an initial investment of Rs.20,000 and a life of 4 years. The following is the list of estimated cash inflows after taxes and depreciation.
<table>
<tr><th>Years</th><th>Proposal-I</th><th>Proposal-II</th><th>Proposal-III</th></tr>
<tr><td>1</td><td>12,500</td><td>11,750</td><td>13,500</td></tr>
<tr><td>2</td><td>12,500</td><td>12,250</td><td>12,500</td></tr>
<tr><td>3</td><td>12,500</td><td>12,500</td><td>12,250</td></tr>
<tr><td>4</td><td>12,500</td><td>13,500</td><td>11,750</td></tr>
<tr><td>Total</td><td>50,000</td><td>50,000</td><td>50,000</td></tr>
</table>
Predict Accounting Rate of Return on (i) Average Capital (ii) Original Capital Employed.</td><td>Apply</td><td>6</td></tr>
<tr><td>7</td><td>A Company has an investment opportunity costing Rs.40,000 with the following expected net cash flow after taxes and before depreciation.
<table>
<tr><th>Years</th><th>Net Cash Flows (Rs.)</th><th>P.V. of Rs.1 @10% D.f</th><th>P.V. of Rs.1 @15% D.f</th></tr>
<tr><td>1</td><td>7,000</td><td>0.909</td><td>0.870</td></tr>
<tr><td>2</td><td>7,000</td><td>0.826</td><td>0.756</td></tr>
<tr><td>3</td><td>7,000</td><td>0.751</td><td>0.658</td></tr>
<tr><td>4</td><td>7,000</td><td>0.683</td><td>0.572</td></tr>
<tr><td>5</td><td>7,000</td><td>0.621</td><td>0.497</td></tr>
<tr><td>6</td><td>8,000</td><td>0.564</td><td>0.432</td></tr>
<tr><td>7</td><td>10,000</td><td>0.513</td><td>0.376</td></tr>
<tr><td>8</td><td>15,000</td><td>0.467</td><td>0.327</td></tr>
<tr><td>9</td><td>10,000</td><td>0.424</td><td>0.284</td></tr>
<tr><td>10</td><td>4,000</td><td>0.386</td><td>0.247</td></tr>
</table>
Using 10% as the cost of capital, Compute i) Pay- back period. (ii)Net Present Value @10% D.f. and 15% D.f. iii) Profitability Index @10% D.f.and iv) IRR with the help of 10% and 15% D.f.</td><td>Understand</td><td>6</td></tr>
<tr><td></td><td>UNIT-V
INTRODUCTION TO FINANCIAL ACCOUNTING & FINANCIAL ANALYSIS</td><td></td><td></td></tr>
<tr><td>1.</td><td>Define Financial Accounting. Explain the importance and Limitations of Financial Accounting.</td><td>Remember</td><td>7</td></tr>
<tr><td>2.</td><td>Define Account. Illustrate different types and principles of Accounts (Rules of Debit and Credit).</td><td>Apply</td><td>7</td></tr>
<tr><td>3.</td><td>Define Double Entry System. Describe the advantages and Disadvantages of Double Entry System.</td><td>Evaluate</td><td>7</td></tr>
<tr><td>4.</td><td>List out different types of Accounting Concepts.</td><td>Understand</td><td>7</td></tr>
</table>

<table>
<tr><th>S. No</th><th>Question</th><th>Blooms Taxonomy Level</th><th>Course Outcome</th></tr>
<tr><td>5.</td><td>List out different types of Accounting Conventions.</td><td>Understand</td><td>7</td></tr>
<tr><td>6.</td><td>Define Ratio Analysis. Describe the advantages/ significance and limitations of Ratio Analysis.</td><td>Remember</td><td>8</td></tr>
<tr><td>7</td><td>Write Journal Entries in the books of Mr. Bhavani Sankar from the following transactions
2002, Jan.1st Business commenced with Rs.15,000
Jan.2nd . Cash paid into bank Rs.10,000
Jan. 3rd .Sold goods for cash Rs.7,000
Jan. 4th . Purchased goods from Vijay Rs.3,000
Jan. 5th . Machinery Purchased for Rs.5,000
Jan.30th Rent paid Rs.2,000
Jan 31st Depreciation charged on Machinery Rs.3,000
Jan 31st Depreciation charged on Furniture Rs.500</td><td>Apply</td><td>7</td></tr>
<tr><td>8</td><td>Prepare Trial Balance of Mr.Ravikumar as on 31.12.2005 from the following balances: Rs. Rs.
1. Capital 32,000   16. Creditors 12,500
2. Machinery 30,000   17. Returns Outwards(P/R) 2,000
3. Opening Stock 16,000   18. Returns Inwards (S/R) 3,600
4. Wages 50,000   19. Drawings 2,000
5. Carriage inwards 500   20. Discount Allowed 750
6. Salaries 5,000   21. Discount Received 250
7. Factory Rent 2,400   22. Office Expenses 1,000
8. Repairs 400   23. Manufacturing Exp. 600
9. Fuel & Power 2,500   24. Bills Payable 6,500
10. Buildings 40,000   25. Bills Receivable 5,000
11. Sundry Debtors 20,000   26. Cash in Hand 2,400
12. Sales 2,03,600   27.Cash at Bank 15,400
13. Purchases 1,22,000   28.Office Rent 1,800
14. Bank O.D 2,000
15. Suspense A/c (Cr)59,300</td><td>Apply</td><td>7</td></tr>
<tr><td>9</td><td>From the following Trial Balance and Adjustments, show Trading and Profit& Loss Account for the year ending 31-12-2003 and Balance Sheet as on that date in the books of Mr. Vijay.
<table>
<tr><th>Sl. No.</th><th>Heads of Accounts</th><th>L.F</th><th>Debit Balance (Rs.)</th><th>Credit Balance (Rs.)</th></tr>
<tr><td>1.</td><td>Electricity</td><td></td><td>14,000</td><td></td></tr>
<tr><td>2.</td><td>Discount</td><td></td><td></td><td>22,000</td></tr>
<tr><td>3.</td><td>Interest</td><td></td><td>16,000</td><td></td></tr>
<tr><td>4.</td><td>Wages</td><td></td><td>50,000</td><td></td></tr>
<tr><td>5.</td><td>Opening Stock</td><td></td><td>20,000</td><td></td></tr>
<tr><td>6.</td><td>Rent</td><td></td><td>24,000</td><td></td></tr>
<tr><td>7.</td><td>Sales</td><td></td><td></td><td>8,00,000</td></tr>
<tr><td>8.</td><td>Purchases</td><td></td><td>3,00,000</td><td></td></tr>
<tr><td>9.</td><td>Office Expenses</td><td></td><td>30,000</td><td></td></tr>
<tr><td>10.</td><td>Land & Building</td><td></td><td>5,40,000</td><td></td></tr>
<tr><td>11.</td><td>Salaries</td><td></td><td>90,000</td><td></td></tr>
<tr><td>12.</td><td>Returns</td><td></td><td>20,000</td><td>10,000</td></tr>
<tr><td>13.</td><td>Power, Gas and Water</td><td></td><td>30,000</td><td></td></tr>
<tr><td>14.</td><td>Sundry Creditors</td><td></td><td></td><td>60,000</td></tr>
<tr><td>15.</td><td>Capital</td><td></td><td></td><td>3,02,000</td></tr>
<tr><td>16.</td><td>Furniture</td><td></td><td>15,000</td><td></td></tr>
</table></td><td>Understand</td><td>7
a</td></tr>
</table>

17.	Sundry Debtors		60,000	
18.	Bills Payable			15,000
	TOTAL		12,09,000	12,09,000

Adjustments:

1. Closing Stock Rs.80,000.
2. Outstanding Salaries Rs.10,000.
3. Depreciate Buildings by 10% p.a.

10 — Understand — 8

You are required to compute i) Debt Equity Ratio ii) Proprietary Ratio iii) Fixed Assets Ratio iv) Interest Coverage Ratio from the following Balance Sheet.

Liabilities	**Amount (Rs.)**	**Assets**	**Amount (Rs.)**
Equity Share Capital	10,00,000	Goodwill	5,00,000
6% Preference Share Capital	5,00,000	Plant& Machinery	6,00,000
General Reserve	1,00,000	Land & Building	7,00,000
Surplus (P&L A/c)	4,00,000	Furniture	1,00,000
12% Debentures	5,00,000	Stock- in -Trade	6,00,000
Creditors	80,000	Bills Receivables	30,000
Bank Overdraft	20,000	Debtors	1,50,000
Bills Payable	1,24,000	Bank Balance	2,00,000
Provision for Taxation	1,76,000	Marketable Securities	20,000
	29,00,000		**29,00,000**

Other Information: Earnings Before Interest and Taxes (EBIT) Rs. 5,00,000

11 — Evaluate — 8

You are required to compute i) Current Ratio ii) Quick Ratio / Acid Test Ratio iii) Absolute Quick Ratio from the following Balance Sheet.

Liabilities	Amount (Rs.)	Assets	Amount (Rs.)
Equity Share Capital	10,00,000	Goodwill	5,00,000
6% Preference Share Capital	5,00,000	Plant& Machinery	6,00,000
General Reserve	1,00,000	Land & Building	7,00,000
Profit & Loss A/c	4,00,000	Furniture	1,00,000
12% Debentures	5,00,000	Stock- in -Trade	6,00,000
Creditors	80,000	Bills Receivables	30,000
Bank Overdraft	20,000	Debtors	1,50,000
Bills Payable	1,24,000	Bank Balance	2,00,000
Provision for Taxation	1,76,000	Marketable Securities	20,000
	29,00,000		29,00,000

12 — Understand — 8

From the following Balance Sheet, You are required to predict (1) Debt-Equity Ratio (2) Proprietary Ratio (3) Stock / Inventory Turnover Ratio (4) Average collection Period. (5) Current Ratio (6) Acid-Test Ratio / Quick Ratio.

Balance Sheet of M/s. XYZ Ltd as on 31st March, 2003.

Liabilities	Amount (Rs.)	Assets	Amount(Rs.)
Share Capital	1,00,000	Land Buildings	1,25,000

Reserves & Surplus	65,000	Plant & Machinery	75,000
5% Debentures	1,00,000	Stock / Inventory	50,000
Bills Payable	7,000	Book Debts	10,000
Sundry Creditors	18,000	Bills Receivable	5,000
		Cash at Bank	20,000
		Preliminary Expenses	5,000
	2,90,000		2,90,000

Other Information: Sales for the year Rs.6,00,000

13	You are required to Compute i) Gross Profit Ratio ii) Net Profit Ratio iii) Operating Ratio iv) Operating Profit Ratio from the following Trading and Profit& Loss Account.	Remember	8

Particulars	Amount Rs.	Particulars	Amount Rs.
To Opening Stock	30,000	By Net Sales	1,10,000
To Purchases	60,000	By Closing Stock	20,000
To Wages	10,000		
To Gross Profit	30,000		
	1,30,000		**1,30,000**
To Administrative Expenses	10,000	By Gross Profit	30,000
To Selling & Distribution Expenses To Net Profit	5,000 20,000	By Sundry Receipt	5,000
	35,000		**35,000**

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HOD, CE