

G.PULLAIAH COLLEGE OF ENGINEERING AND TECHNOLOGY
(Autonomous)

Venkayapalle (V), Nandikotkur Road, Kurnool, Andhra Pradesh-518452
II-B. Tech, II-Semester, I-Mid Examinations, March 2025.

Common to CE/CEM/MECE&ME, EAI

Subjective Paper

Set-3

Subject: Managerial Economics and Financial Analysis (A40022)

Time: 90 Minutes

Date: 05.03.2025

Max Marks: 30

Answer any 3 questions

(3X10 = 30M)

1. Define Managerial Economics? Explain its relation with other subjects?

Marks	Unit	CO	Cognitive Level
10M	1	C01	Remember

(OR)

2. What is demand? Explain Factors determining the Demand.

10M	1	C01	Remember
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3. What is Demand Forecasting? What are the Factors Governing the Demand Forecasting.

(OR)

10M	1	C01	Remember
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4. Define concept of production. Explain types of production.

10M	2	C02	Remember
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5. Explain the Cobb-Douglas Production Function with its mathematical equation & assumptions

10M	2	C02	Understand
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(OR)

6. What is Break Even analysis? Explain Advantages and Disadvantages.

10M	2	C02	Understand
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M.Swaroop Pan
Signature of the Faculty

Degrae
Signature of the HOD

G.PULLAIAH COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous)

Venkayapalli - Nandikotkur Road - Kurnool - Andhra Pradesh - 518 452

II-B.Tech, II- Semester II MID Examinations, April 2025.

SET-2

Common to CE/CSE/CAI/ECE and EEE

Subject: Managerial economics and Financial Analysis (A40022)

Time: 90 Min.

Date: 02.05.2025

Max.Marks: 30M

Answer any three following. Each Question carries equal marks.

(03x10M=30M)

1. Define partnership? Explain it's features, advantages and disadvantages?
- | Marks | Unit | CO | Cognitive Level |
|-------|------|-----|-----------------|
| 10M | 3 | CO3 | Remember |
2. What is Joint Stock Company? Explain it's features, advantages and disadvantages?
- | | | | |
|-----|---|-----|------------|
| 10M | 3 | CO3 | Understand |
|-----|---|-----|------------|
3. Describe working capital and explain the factors determining the working capital requirements?
- | | | | |
|-----|---|-----|----------|
| 10M | 4 | CO4 | Remember |
|-----|---|-----|----------|
4. Calculate the Pay Back Period and Net Present Value from the following information with the cost of Rs. 50000 each.

10M	4	CO4	Apply
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Projects/ Cash flows	C1	C2	C3	C4	C5
A	13000	14000	15000	14000	13000
B	16000	15000	14000	13000	12000
Present Value factors @ 10%	0.909	0.826	0.756	0.683	0.621

5. Explain the process of accounting with suitable formats?
- | | | | |
|-----|---|-----|----------|
| 10M | 5 | CO5 | Remember |
|-----|---|-----|----------|
6. Write the journal entries for the following transactions?
- | | | | |
|-----|---|-----|-------|
| 10M | 5 | CO5 | Apply |
|-----|---|-----|-------|

February 1- 2025- Kumar started the business with Rs. 100000

February 2- 2025- Purchased products of Rs.10000

February 3- 2025 – Loan taken from Ramesh of Rs. 15000

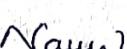
February 4- 2025 - Purchase of goods on credit from Narendra for Rs.9000

February 5- 2025 -Sold goods of Rs.25000

February 6- 2025 -Purchase of goods for cash Rs. 20000

February 7- 2025 -Sold goods to Ramu for Rs.50000

February 8- 2025 -Cash deposited into bank Rs.10000


Signature of the Faculty


Signature of the HOD

G. PULLAIAH COLLEGE OF ENGINEERING AND TECHNOLOGY
(AUTONOMOUS)

B.Tech II Year II Semester Regular Examinations May 2025

Subject Name: **MANAGERIAL ECONOMICS AND FINANCIAL ANALYSIS**

Branch: **CE, ECE & CAI**

Time: 3 Hours

SET-2

Max. Marks: 70

Instructions:

1. Answer all 10 questions from Part-A. Each question carries two marks
2. Answer one full question from each unit in Part-B. Each full question carries 10marks

PART-A

1	a	What is the purpose of demand forecasting?	2M	CO1	BTL1
	b	Define Demand Elasticity.	2M	CO1	BTL1
	c	Mention any two cost concepts.	2M	CO3	BTL1
	d	Define MRTS.	2M	CO2	BTL1
	e	State any two features of a Partnership Firm.	2M	CO2	BTL1
	f	When do you call competition as perfect competition?	2M	CO3	BTL1
	g	Mention two methods used to evaluate Capital Budgeting Proposals.	2M	CO4	BTL1
	h	Working capital	2M	CO4	BTL1
	i	What is trial balance.	2M	CO5	BTL1
	j	Define Ledger.	2M	CO5	BTL1

PART-B

UNIT-I

2	"Managerial economics is interdisciplinary". Explain.	10M	CO1	BTL2
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OR

3	Discuss the determinants of Demand and explain the expansion and contraction of Demand.	10M	CO1	BTL2
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UNIT-II

4	Determine B.E.P and Margin of safety.	10M	CO2	BTL3									
	<table border="1"> <thead> <tr> <th>Year</th> <th>Sales (Rs.)</th> <th>Profit (Rs.)</th> </tr> </thead> <tbody> <tr> <td>2021</td> <td>5,00,000</td> <td>40,000</td> </tr> <tr> <td>2023</td> <td>8,00,000</td> <td>1,25,000</td> </tr> </tbody> </table>	Year	Sales (Rs.)	Profit (Rs.)	2021	5,00,000	40,000	2023	8,00,000	1,25,000			
Year	Sales (Rs.)	Profit (Rs.)											
2021	5,00,000	40,000											
2023	8,00,000	1,25,000											

OR

5	Discuss the concept of Least-Cost Combination with an example.	10M	CO2	BTL1
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UNIT-III

6	Discuss Price-Output Determination under different market structures.	10M	CO3	BTL2
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OR

	Discuss the features, advantages and disadvantages of sole proprietorship.	10M	CO3	BTL2
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UNIT-IV

8	Define capital budgeting. Explain the process of capital budgeting.	10M	CO3	BTL2
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OR

9	A project generated the following cash flows. calculate the payback period.	10M	CO4	BTL1																											
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Particulars</th> <th>Project-A</th> <th>Project-B</th> </tr> </thead> <tbody> <tr> <td>Initial Invesment</td> <td>1,00,000 80,000</td> <td>1,00,000 60,000</td> </tr> <tr> <td>Life</td> <td>5</td> <td>5</td> </tr> <tr> <td>Cash flows</td> <td></td> <td></td> </tr> <tr> <td>1</td> <td>10,000</td> <td>12,000</td> </tr> <tr> <td>2</td> <td>12,000</td> <td>14,000</td> </tr> <tr> <td>3</td> <td>20,000</td> <td>23,000</td> </tr> <tr> <td>4</td> <td>25,000</td> <td>27,000</td> </tr> <tr> <td>5</td> <td>23,000</td> <td>28,000</td> </tr> </tbody> </table>	Particulars	Project-A	Project-B	Initial Invesment	1,00,000 80,000	1,00,000 60,000	Life	5	5	Cash flows			1	10,000	12,000	2	12,000	14,000	3	20,000	23,000	4	25,000	27,000	5	23,000	28,000			
Particulars	Project-A	Project-B																													
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3	20,000	23,000																													
4	25,000	27,000																													
5	23,000	28,000																													

UNIT-V

10	Prepare journal entries for the given financial transactions. Jan-11 Albert starts business with Rs. 50,000. Jan-12 He opens a SBI saving bank account and deposits Rs. 20,000. Jan-13 Bought furniture for Rs. 5,000, machinery for Rs. 10,000. Jan-14 Purchased goods for Rs. 14,000. Jan-15 Sold goods for Rs. 8,000. Jan-16 Purchased goods from Malhotra & Company for Rs. 11,000. Jan-17 Paid telephone rent for the year by Cheque Rs. 500 Jan-18 Bought one typewriter for Rs. 2,100 from 'Universal Typewriter Co.' on credit. Jan-19 Sold goods to Keshav Ram for Rs. 12,000. Jan-30 Sold goods to Rajesh Kumar for Rs. 2000 cash.	10M	CO5	BTL1
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OR

11	Define double entry system. Distinguish between book-keeping and double entry system.	10M	CO5	BTL4
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(Contd.)

Table C: Present Value factor of a lump sum (PVF) of Re 1

Year	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.925	0.917	0.907	0.899	0.891	0.885	0.877
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.855	0.837	0.815	0.794	0.772	0.751	0.729
3	0.971	0.942	0.915	0.890	0.857	0.835	0.812	0.786	0.752	0.717	0.681	0.645	0.607	0.570
4	0.961	0.924	0.888	0.840	0.816	0.794	0.772	0.740	0.708	0.673	0.635	0.595	0.555	0.515
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.641	0.603	0.561	0.513	0.462	0.409
6	0.942	0.888	0.837	0.790	0.746	0.705	0.665	0.623	0.583	0.547	0.502	0.454	0.406	0.356
7	0.933	0.871	0.813	0.760	0.711	0.670	0.625	0.583	0.541	0.500	0.459	0.414	0.367	0.315
8	0.923	0.853	0.789	0.731	0.677	0.620	0.567	0.523	0.481	0.435	0.386	0.336	0.286	0.230
9	0.914	0.837	0.766	0.703	0.645	0.592	0.539	0.486	0.434	0.380	0.328	0.272	0.215	0.160
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.458	0.406	0.350	0.299	0.244	0.187	0.133
11	0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.420	0.368	0.312	0.259	0.205	0.150	0.100
12	0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.387	0.330	0.275	0.220	0.161	0.107	0.053
13	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.306	0.250	0.195	0.137	0.077	0.023
14	0.870	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.236	0.180	0.120	0.060	0.000
15	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.213	0.163	0.103	0.043	0.000
16	0.853	0.728	0.623	0.534	0.458	0.394	0.339	0.292	0.252	0.198	0.148	0.088	0.028	0.000
17	0.844	0.714	0.605	0.513	0.436	0.371	0.317	0.270	0.231	0.178	0.128	0.078	0.018	0.000
18	0.836	0.700	0.587	0.494	0.416	0.350	0.296	0.250	0.212	0.160	0.110	0.060	0.010	0.000
19	0.828	0.686	0.570	0.475	0.394	0.327	0.270	0.232	0.180	0.130	0.080	0.030	0.005	0.000
20	0.820	0.673	0.554	0.475	0.395	0.323	0.258	0.215	0.178	0.128	0.078	0.028	0.005	0.000
25	0.780	0.610	0.478	0.375	0.295	0.223	0.184	0.146	0.116	0.075	0.049	0.029	0.010	0.000
30	0.742	0.552	0.412	0.308	0.231	0.174	0.131	0.099	0.075	0.044	0.024	0.013	0.005	0.000
35	0.706	0.500	0.355	0.253	0.181	0.130	0.094	0.068	0.049	0.036	0.026	0.016	0.006	0.000
40	0.672	0.453	0.307	0.208	0.142	0.097	0.067	0.046	0.032	0.022	0.015	0.011	0.006	0.000
50	0.608	0.372	0.228	0.141	0.087	0.054	0.034	0.021	0.013	0.009	0.005	0.003	0.002	0.001

Table C: Present Value factor of Lump Sum (PVL) of Re 1

Year	15%	16%	17%	18%	19%	20%	21%	22%	23%	24%	25%	30%	35%	40%
1	0.870	0.862	0.855	0.847	0.840	0.833	0.826	0.820	0.813	0.806	0.800	0.769	0.741	0.714
2	0.756	0.743	0.731	0.718	0.706	0.694	0.683	0.672	0.661	0.650	0.640	0.592	0.549	0.510
3	0.658	0.641	0.624	0.609	0.593	0.579	0.564	0.551	0.537	0.524	0.512	0.455	0.406	0.364
4	0.572	0.552	0.534	0.516	0.499	0.482	0.467	0.451	0.437	0.423	0.410	0.350	0.301	0.260
5	0.497	0.476	0.456	0.436	0.419	0.402	0.386	0.370	0.355	0.341	0.328	0.269	0.223	0.186
6	0.432	0.410	0.390	0.370	0.352	0.335	0.319	0.303	0.289	0.275	0.241	0.194	0.144	0.108
7	0.376	0.354	0.333	0.314	0.296	0.279	0.263	0.249	0.235	0.222	0.210	0.159	0.122	0.095
8	0.327	0.305	0.285	0.266	0.249	0.233	0.218	0.204	0.191	0.179	0.168	0.123	0.091	0.068
9	0.284	0.263	0.243	0.227	0.209	0.194	0.180	0.177	0.155	0.144	0.134	0.094	0.067	0.048
10	0.247	0.227	0.208	0.191	0.176	0.162	0.149	0.137	0.126	0.116	0.107	0.073	0.050	0.035
11	0.215	0.195	0.178	0.162	0.148	0.135	0.123	0.112	0.103	0.094	0.086	0.056	0.037	0.025
12	0.187	0.168	0.152	0.137	0.124	0.112	0.102	0.092	0.083	0.076	0.069	0.043	0.027	0.018
13	0.163	0.145	0.130	0.116	0.104	0.093	0.084	0.075	0.068	0.061	0.055	0.033	0.020	0.013
14	0.141	0.125	0.111	0.099	0.088	0.078	0.068	0.061	0.053	0.049	0.044	0.025	0.015	0.009
15	0.123	0.108	0.095	0.084	0.074	0.065	0.057	0.051	0.045	0.040	0.035	0.020	0.011	0.006
16	0.107	0.093	0.081	0.071	0.062	0.054	0.047	0.042	0.036	0.032	0.028	0.015	0.008	0.005
17	0.093	0.080	0.069	0.060	0.052	0.045	0.040	0.035	0.030	0.026	0.023	0.012	0.006	0.003
18	0.081	0.069	0.059	0.051	0.044	0.038	0.033	0.034	0.030	0.026	0.021	0.012	0.006	0.003
19	0.070	0.060	0.051	0.043	0.037	0.031	0.027	0.023	0.020	0.017	0.014	0.009	0.005	0.002
20	0.061	0.051	0.043	0.037	0.031	0.026	0.022	0.019	0.016	0.014	0.012	0.005	0.002	0.001
25	0.030	0.024	0.020	0.016	0.013	0.010	0.009	0.007	0.006	0.005	0.004	0.001	0.001	0.000
30	0.015	0.012	0.010	0.009	0.007	0.005	0.004	0.003	0.002	0.002	0.001	0.001	0.000	0.000
35	0.008	0.006	0.004	0.004	0.003	0.002	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000
40	0.004	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
50	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Unit -I

1. Define Managerial Economics. Illustrate how it helps in solving managerial problems. **(or)**
Define Managerial Economics. Explain its nature and scope.
2. Explain how managerial economics is linked with financial accounting & management.
3. Demand concepts and its functions.
4. Elasticity of Demand and different types of elasticity of demand.
5. What is demand forecasting? Explain the different methods of demand forecasting.
6. What is demand analysis? Explain the factor influencing the demand for a product. What are the various factors that influence the demand for a computer?

Unit-II

7. Production function. cobb and douglas production function.
8. What are isoquants? Explain the features of Isoquants.
9. Discuss the economies of scale that accrue to a firm.
10. What cost concepts are mainly used for management decision.
11. Define BEP. How do you determine it? Show graphical presentation of Break Even Analysis.
12. BEP Examples.

Unit-III

13. Explain the features of perfect competition. Explain how the price is determined in case of perfect competition.
14. Explain the features of oligopoly and monopolistic market competition.
15. Explain the various methods of pricing.
16. What do you mean by sole proprietorship? Explain its features. Evaluate (advantages and limitations) sole proprietorship.
17. What are the different kinds of partners.
18. Explain the steps in formation of Joint stock Company with advantages and Disadvantages of a joint stock company.

Unit-IV

19. Explain the various sources of finance.
20. Components of working capital. Factors determine the working capital requirements of a company.
21. Explain the various methods of capital budgeting.
22. Importance of capital budgeting. Steps involved in evaluating capital budgeting proposals.
23. Problems related to: **Pay Back period, ARR, NPV, PI** and Internal Rate of Return.

Unit-V

24. Concept of Financial Statement Analysis. Importance and Limitations.
25. Accounting Principles (Concepts (8) and Conventions (4)).
26. Accounting Process and Rules of accounting or Types of accounts.
27. Ratio analysis and Importance and limitations of ratio analysis.
28. Examples in **writing entries in journal and Ratio (5 Only)**

- 1. Commenced business, 2.Cash purchases, 3.Credit purchases, 4.Cash sales, 5.Credit sales,**
- 6. Purchased furniture, 7.Sold furniture, 8.Drawings (cash/goods drawn for personal use)**
- 9. Discount/Commission/ Interest Received, 10.Discount/Commission/ Interest paid**
- 11. Salaries paid, Rent paid, 12.Outstanding Salaries 13.Cash deposited at bank.**

Journal Entries in the Books of ABC Company.

Date	Particulars	LF	Debit Amount	Credit Amount
1	Cash a/c Dr To Capital a/c (Being Commencement of Business)		****	****
2	Purchases Dr To Cash a/c (Being Cash Purchases)		****	****
3	Purchases a/c Dr To Person a/c (Being purchased on Credit)		****	****
4	Cash a/c Dr To Sales a/c (Being cash Sales)		****	****
5	Person a/c Dr To Sales a/c (Being cash Sales)		****	****
6	Purchases(Furniture)a/c Dr To Cash a/c (Being Furniture Purchased)		****	****
7	Cash a/c Dr To (Sales)Furniture a/c (Being Furniture sold)		****	****
8	Drawing a/c Dr To Cash/ Product a/c (Being Drawings)		****	****
9	Cash a/c Dr To Discount/interest a/c (Being Dis./Inter./Comm. received)		****	****
10	Discount/Interest a/c Dr To Cash a/c (Being Dis./Inter./Comm. Paid)		****	****
11	Salary/Rent/ Expenses a/c Dr To Cash a/c (Being Expenses Paid)		****	****
12	Salary a/c Dr To Outstanding salary a/c (Being out standing salary)		****	****
13	Bank a/c Dr To Cash a/c (Being cash deposited in bank)		****	****
14	Cash a/c Dr To Bank a/c (Being cash Withdrawn from bank)		****	****

Q: Rules of accounting or Types of accounts

Ans: Types of Accounts are three.

1. Personal Account

Rule: **DEBIT** the Receiver
CREDIT the Giver

2. Real Account

Rule: **DEBIT** what comes in
CREDIT what goes out

3. Nominal Account

Rule: **DEBIT** All Expenses and Losses
CREDIT All Incomes and Gains

Example in Ratio Analysis:**Q: From the following Calculate 1.Current Ratio, 2.Quick Ratio and 3. Debt Equity Ratio**

Liabilities	Amount	Assets	Amount
Equity Capital	100000	Land & Buildings	120000
Debentures	50000	Furniture	80000
Bank Loan	150000	Fixtures	60000
Creditors	20000	Stock / Inventory	30000
Bills Payables	30000	Debtors	25000
Bank Overdraft	15000	Cash/Bank Balance	45000
Outstanding Expenses	5000	Advance Payments	10000
	370000		370000

Ans:

1. Current Ratio = Current Assets/ Current Liabilities

$$\begin{aligned} \text{Current Assets} &= \text{Stock} + \text{Debtors} + \text{Cash} + \text{Adv. Payments} \\ &= 30000 + 25000 + 45000 + 10000 = 110000 \end{aligned}$$

$$\begin{aligned} \text{Current Liabilities} &= \text{Creditors} + \text{Bills Payables} + \text{Bank Overdraft} + \text{Outstanding Exp.} \\ &= 20000 + 30000 + 15000 + 5000 = 70000 \end{aligned}$$

$$\text{Current Ratio} = 110000 / 70000 = 1.54$$

2. Quick Ratio = Quick Assets / Current Liabilities

$$\begin{aligned} \text{Quick Assets} &= \text{Cash} + \text{Debtors} + \text{Adv. Payments} \\ &= 45000 + 25000 + 10000 = 80000 \\ \text{Quick Ratio} &= 80000 / 70000 = 1.12 \end{aligned}$$

3. Debt Equity Ratio= Outsiders fund / Owner's fund (Equity Capital)

$$\begin{aligned} \text{Outsiders Fund} &= \text{Debentures} + \text{Bank Loan} \\ &= 50000 + 150000 = 200000 \\ \text{Owner's Fund} &= 100000 \end{aligned}$$

$$\text{Debt Equity Ratio} = 200000 / 100000 = 2$$

4. Gross Profit Ratio = Gross Profit/Sales**5. Net Profit Ratio = Net Profit / Sales**

$$\begin{aligned} \text{Sales} - \text{Cost of Sales} &= \text{Gross Profit} \\ \text{Sales} - \text{all Costs (Expenses)} &= \text{Net Profit} \end{aligned}$$

II MID Question Paper Pattern

20 Objective Questions (Answer All Question) = 10 Marks
6 Long Questions (Answer 3 Questions) = 30 Marks

Chapter -3 (6 Objective Questions)

(2 Long Answer Questions) – 1. Break Even Analysis

Chapter -4 (7 Objective Questions)

(2 Long Answer Questions) – 1. Journal Entries

Chapter -5 (7 Objective Questions)

(2 Long Answer Questions) - 1. Ratios