

MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS)

(Affiliated to JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD)
Gundlapochampally (H), Maisammaguda (V), Medchal (M), Medchal-Malkajgiri (Dist), Hyderabad

III B.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS, NOVEMBER-2019Subject: **MICROPROCESSORS AND INTERFACING**Branch: **CSE****Time: 3 hours****Max. Marks: 75****Answer any 5 questions of the following****5x15M=75 M**

1. a) Explain difference between 8085 microprocessors and 8086 microprocessors [7M]
b) What do you mean by pipe lined architecture? How is it implemented in 8086 microprocessor [8M]
2. a) Explain about string manipulation instructions with suitable examples [7M]
b) Write an assembly language program to sort the numbers in descending order using bubble sort [8M]
3. a) Describe the function of the following pins and their use in 8086 based system. [7M]
(i)NMI (ii) \overline{LOCK} (iii) \overline{TEST} (iv) RESET.
b) With a neat block diagram explain the working of 8237 DMA controller. [8M]
4. a) Explain about I/O modes of 8255. [8M]
b) Explain 7 segment display is interfaced to 8086 microprocessor [7M]
5. a) Explain about DOS and BIOS interrupts with suitable examples [7M]
b) Explain the function of the following pins of 8259A [8M]
(i) CAS₀ – CAS₂ (ii) $\overline{SP} / \overline{EN}$ (iii) \overline{INTA} (iv) INT
6. a) Give the specifications of RS232C and also explain about line driver and line receiver used in serial communication. [7M]
b) Write a program to initialize 8251 in synchronous mode with even parity, single SYNCH character, 7-bit data character. Then receive FFH bits of data from a remote terminal and store in the memory at address 5000H:2000H. [8M]
7. a) Draw and explain about the internal block diagram of 80286 [8M]
b) Briefly explain about the salient features of 80386. How it is different from 80286. [7M]
8. Write short notes on any TWO [15M]
a) Register set of 8051.
b) Addressing modes of 8051.
c) Interfacing of Matrix keyboard 8051.

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Gundlapochampally (H), Maisammaguda (V), Medchal (M), Medchal-Malkajgiri (Dist), Hyderabad**III B.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS, NOVEMBER-2019**Subject: Managerial Economics and Financial AnalysisBranch: CSE

Time: 3 hours

Max. Marks: 75

Answer any 5 questions of the following

5x15M=75 M

1. Managerial Economics is "The Integration of Economic Theory with business practice for the purpose of decision making and forward planning". Discuss.
2. a) What is Elasticity? Explain different types of Elasticity of Demand? [8M]
b) The price of LCD TV is Rs. 31,999/- and the original quantity demanded is 80 units in month. When price falls to Rs. 26,999/- and the quantity demanded rise to 92 units. Calculate the price elastic of demand. [7M]
3. Explain the following with reference to production function
a) MRTS
b) Variable proportions of factors
4. Discuss the different conditions in markets that affect the way in which prices and outputs are determined and Why is perfect competition normally regarded as being 'better' than monopoly? In what ways may perfect competition not be 'perfect'?
5. Provide a detailed note on types of business enterprises in Indian business environment and state the changing business environment in post-liberalization scenario.
6. a) Explain Main sources of Long-term Finance? [8M]
b) Determine which of the following two mutually exclusive projects R & S preferable under DCF Technique (NPV & Profitability Index) to M/S Pentagon Universal Construction Ltd. [7M]

Year	Project — R	Project — S	PV Factor @ 10%
1	50000	35000	0.0909
2	55000	55000	0.826
3	60000	75000	0.751
4	40000	65000	0.683
5	65000	40000	0.621
Scrap value	30000	25000	0.621

Note: Initial Cost of Investment for both projects is Rs. 2,00,000/- & Life is 5 Years PV Factor 10% for calculations of NPV.

7. From the Prasad & Co. Trail Balance, Prepare Trading A/c, profit and loss A/c and Balance Sheet for the year ended 31-03-2013.

TRIAL BALANCE AS ON 31-03-2013

Particulars	Debit. Balance Rs.	Particulars	Credit Balance Rs.
Purchases	75,000	Capital	50,000
Returns inwards	1,000	Sales	1,75,000
Carriage	1,200	Creditors	25,000
Rent & Taxes	2,500	Returns outwards	4,700
Stock	15,000	Interest	500
Debtors	40,000	Provision for doubtful debts	2,200
Salary	22,500		
Wages	10,800		
Plant & Machinery	50,000		
Furniture	10,000		
Cash at bank	29,400		
	2,57,400		2,57,400

- Adjustments:
- 1) Closing Stock R. 15,000/-
 - 2) Depreciate plant & machinery 10 % , Furniture at 15 %
 - 3) Interest due but not received Rs.500/-
 - 4) Provision for bad debts to be maintained at 2 %
 - 5) Outstanding rent Rs.300/-

8. From the following balance sheet of XYZ Co. ltd, calculate the following ratios: a) Current ratio
b) Quick ratio and c) Debt-equity ratio.

Balance sheet of XYZ CO. Ltd as on 31/12/2015

Liabilities	Amt Rs.	Assets	Amt Rs.
Equity share capital	1500	Plant & machinery	975
Debentures	400	Stock	550
Creditors	200	Debtors	550
Outstanding expenses	100	Cash in hand	375
Profit & Loss Account	100	Prepaid expenses	50
Bank loan (long term)	200		
	2500		2500