

Laxmi Devi Institute of Engineering and Technology

Department of Applied Science

1<sup>st</sup> - Mid Term Exam -2025

B.Tech. 1<sup>st</sup> Semester (1<sup>st</sup> Year), Sub Code- 1FY3-05

Sub- Managerial Economics and Financial Accounting

Max Marks: 10

Part-A

Attempt all questions: -

(0.5\*5=2.5marks)

1. What do you mean by micro economics?
2. Define scarcity.
3. Define economics.
4. What is normative science?
5. What do you mean by managerial economics?

Part-B

Attempt any 2 questions: -

(2\*2=4 marks)

1. Give the difference between Economics and Managerial Economics?
2. Explain the types of Inflation.
3. Explain the scope of economics.

Part-C

Attempt any 1 question: -

(1\*3.5 = 3.5 marks)

1. What is the use of scarcity and choice in central problems of an economy? Explain with examples.
2. Explain the nature of managerial economics.

Laxmi Devi Institute of Engineering and Technology, Chikani (Alwar)

Department Name: Applied Science

Program: B.Tech I-Year

Branch & Sem. : All Branches & I

Max. Time: 120 Mins

I-Mid Term (SET-1)

Session: 2025-26

Subject & Code: Mathematics I & 1FY1-01

Max. Marks: 10

### SECTION-A

Sec-A is compulsory and each part carry equal marks. ( 5 × .5 = 2.5 )

- Q.1(i) Find the Complete Solution of differential equation  $(D^2 + 4)y = 0$   
(ii) Write the form of Bernoulli's Differentiation equation of the first order.  
(iii) Solve the following differential equations:  $x dx + y dy + \frac{x dy - y dx}{x^2 + y^2} = 0$   
(iv) If  $Mdx + Ndy = 0$  find the condition of Exact  
(v) Find the C.F. of given differential equation  $\frac{d^2 y}{dx^2} + a^2 y = \operatorname{cosec} ax$ .

### SECTION-B

Attempt any 2 question out of 3. ( 2 × 2 = 4 )

Q.1. Solve the following differential equations:

$$(1 - x^2) \frac{dy}{dx} + xy = xy^2$$

Q.2. Solve the following differential equations:

$$(2x^2 y^2 + xy) y dx + (xy - x^2 y^2) x dy = 0$$

Q.3. Solve the following differential equations:

$$(x^2 + y^2) dx + 2xy dy = 0$$

### SECTION-C

Attempt any 1 question out of 2. ( 1 × 3.5 = 3.5 )

Q.1. Solve :  $\frac{d^2 y}{dx^2} + a^2 y = \operatorname{cosec} ax$

Q.2. Solve the following differential equations

$$\frac{d^2 y}{dx^2} - 4y = x \sin 2x$$



Laxmi Devi Institute of Engineering and Technology, Chikani (Alwar)  
Department Name: Applied Science I-Mid Term (SET-1)  
Program: B.Tech I-Year Session: 2024-25  
Branch & Semester: All Branches & II Subject & Code: Engineering Chemistry  
Max. Time: 2 hours Max. Marks: 10

**SECTION-A**

Sec-A is compulsory and each part carry equal marks. ( $5 \times 5 = 2.5$ )

1. What happens when temporary hard water is boiled?
2. What do you understand by hardness of water?
3. Define Flocculation.
4. Enlist methods of removal of non-carbonate hardness
5. Define carbonate conditioning.

**SECTION-B**

Attempt any 2 questions out of 3. ( $2 \times 2 = 4$ )

6. Write an informative note on Reverse Osmosis

Write short note on :

7. Caustic Embrittlement
8. Boiler Corrosion

**SECTION-C**

Attempt any 1 question out of 2. ( $1 \times 3.5 = 3.5$ )

9. Write a detailed note on Break point Chlorination
10. Explain in detail sources of water along with common impurities.

**Laxmi Devi Institute of Engineering and Technology, Chikani (Alwar)**  
**Department of Applied Science**  
**Midterm 1 Exam**  
**Program: B.Tech    Session: 2022-23    Subject & Code: CFP(1FY2-08)**  
**Branch & Semester: All (Sem-1)    Max Time: 1:30    Max Marks: 10**  
**Faculty Name: Dr. Pratap Singh Patwal**

**PART A: Short answer questions (5 no. of questions 0.5 marks each).**

1. What is Algorithm
2. What is Flow Chart
3. How Many keywords in C language
4. What is identifier
5. What is Conditional Operator

**PART B: Analytical / Problem Solving questions.**

**Attempt any two (2) questions out of four (04) (2\*2=4 marks)**

1. Write the basic structure of C program. Explain each section briefly.
2. What is a token? What are different types of tokens available in C language?
3. What is if statement explain its all types
4. Give the differences between while and do-while loops.

**PART C: Descriptive / Analytical / problem Solving / Design Questions.**

**Attempt one (01) question out of three (03) (3.5\*1=3.5 marks)**

1. Write a program in C Enter three difference number and find out the greatest one.
2. Write a program in C find the entered number is Armstrong number or not.
3. Write a program in C to display the pattern like a pyramid using asterisk and each row contain an odd number of asterisks.

Laxmi Devi Institute of Engineering and Technology, Chikani (Alwar)  
Department of Electrical Engineering

I-Midterm Test (Set-B)

Program:- B. Tech.

Subject & Code:- BEE (1FY2-07)

Session:- 2024-25 Max. Time:- 90 min

Branch & Semester:- All (I SEM)

Max. Marks:- 10

PART - A

> Attempt all questions. All questions carry equal marks.

(0.5x5=2.5)

Q.1 Describe current source to voltage source conversion?

Q.2 Write the formulas for star to delta transformation?

Q.3 Define active circuit element?

Q.4 Define node, mesh, loop and branch?

Q.5 What is conductivity?

PART - B

> Attempt any two questions. All questions carry equal marks.

(2x2=4)

Q.1 State and Explain Kirchhoff's laws with an example.

Q.2 State and explain thevenin's theorem with the help of an example.

Q.3 Explain mesh analysis method with the help of an example?

PART - C

> Attempt any one carry equal marks.

(3.5x1=3.5)

Q.1 Find out the current flowing through 20 ohm resistance in the given circuit by using superposition theorem.



Q.2 Explain nodal analysis with the help of an example?

