

Class – XII

Lesson Plan

Session 2023-24

TOPIC: INDEFINITE INTEGRALS

BRIEF DESCRIPTION: -In this chapter, students are taught about an anti derivative of a function and various methods to calculate anti derivatives.

UN Sustainable Goals to be achieved (if any):

Objectives: (put Bloom's level)

I - Specific Objectives

To enable the students to:

S1 **Interpret** integration(U)

S2 **Classify** Different methods of indefinite integration(U)

S3 **Find** Integration by partial fraction(An/Organizing)

S4 **Design** Integration by parts (Sy/Planning)

S5 **Develop** different formula for integration.(Sy/Generating)

Behavioral Objectives

After learning this chapter students will be able to develop

B1 Logical thinking

B2 Critical thinking

Process / Activities

- **Activity (to introduce the lesson)**

ACT1 Students will be asked to recall derivatives of certain terms and reverse e process **(K)**

- **Activity (to support learning)**

ACT2 To derive formula integration of $\log x$ using by parts(An)

Skills (as per subject) Reasoning Skill

Expected Learning Outcomes

Students would be able to :

1 Explain integration (U)

2 Identify the Different methods of indefinite integration(U)

3 Apply Integration by partial fraction(A/Execution)

4 Differentiate Integration by parts and other methods (An)

5 Discriminate different formula for integration.(An/Differentiating)

Assessment: (put Bloom's level)

A1 Write the derivative of $x, x^2, \sin x$ then their anti derivative .(K/recall)

A2. Find the rule for integral of $\tan x$ **(U/infering)**

- A3 Derive the integral of $\sec x$ (An/ Organizing)
 A4. Find the integral of $x \sin x$ (A/Execution)

Placement of Objectives, Instructional Activities and Assessment

TOPIC/START DATE/ASSESSMENT					
KNOELEDGE	UNDERSTANDING	APPLICATION	ANALYSIS	SYNTHESIS	EVALUATION
	S1		S3	S4	
	S2			S5	
ACT1			ACT2		
A1	A2	A4	A3		