

Class – XI
Lesson Plan

Topic: Mathematical and Logical Reasoning

Brief Description of the lesson:

Mathematical and logical reasoning are essential skills for success in many areas of life. By improving student's mathematical and logical reasoning skills, students can become a more effective problem solver, make better decisions, and think more deeply and creatively. Further it is a very important topic for competitive exams.

Objectives:

I - Specific Objectives:

Students will be able to:

S1 understand the importance of chapter for competitive exams (**Understand/Interpreting**)

S2 understand the meaning of term “odd man out” and solve the questions based on it.

(Understand/Classifying) (Apply/Execute)

S3 understand the meaning of term “syllogism” and solve the questions based on it.

(Understand/Classifying) (Apply/Execute)

S4 Understand the meaning of term “coding – decoding” and solve the questions based on it.

(Understand/Classifying) (Apply/Execute)

S5 Students will be able to identify the logical fallacies in an argument. (**Analysis**)

S6 Students will be able to evaluate the evidence for a claim and draw a reasonable conclusion. (**Analysis**)

II - Behavioral Objectives:

Through this chapter students will attain following behavioral objectives;

B1 Given a logical argument, students will be able to identify the assumptions, premises, and conclusion. (**Understanding**) (**Analysis**)

B2 Given a mathematical theorem, students will be able to prove it using deductive reasoning. (**Synthesis**)

Process / Activities:

ACT1 Game based on Coding – Decoding questions. (**Analysis**)

ACT2 Game based on finding the relationship between two persons with the help of a word problem, using family tree diagram. (**Application**)

Skills:

1) Decision making

2) Understanding

3) Analytical thinking

Assessment:

Assessment of activity will be done on the basis of decided rubrics to check:

A1 The **analytical thinking** skill of student

A2 The **understanding** skill of student

Expected Learning Outcomes:

Students would be able to:

- 1) Solve questions based on “odd man out” (**Apply/Implementation**)
- 2) Solve questions based on “syllogism” (**Apply/Implementation**)
- 3) Solve questions based on “blood relations” (**Apply/Implementation**)
- 4) Solve questions based on “coding – decoding” (**Synthesis/Producing**)

Placements of Objectives, Instructional Activities and Assessment:

Topic/Start Date/Assessment					
Knowledge	Understanding	Application	Analysis	Synthesis	Evaluation
	S1	S2	S5	B2	
	S2	S3	S6		
	S3	S4	B1		
	S4	ACT2	ACT1		
	B1				