

2022-2023

X

# TTWRDC(W); Rajanna Siricilla

## DEPARTMENT OF MATHEMATICS

### Value Added Course

**Course Name:** Arithmetic Ability

**Eligibility:** MPC & MPCS (All Years)

**Last Date for Application:** 10-8-2022

**Course Duration:** 16-8-2022 To 22-9-2022

**Exam Date:** 25-9-2022



Head of the  
Department



IQAC  
Co-ordinator



Principal  
TTWRDC(W)SIRCILLA  
Dist: Rajanna Siricilla



TTWRDC(W), THANGALLAPALLY, RAJANNA SIRICILLA

DEPARTMENT OF MATHEMATICS

VALUE ADDED COURSE

Title: **ARITHMETIC ABILITY**

course code: **VACMAT003**

Syllabus:

Arithmetic Ability : 1) Number System 2) Ratio & Proportion 3) Averages 4) Percentages 5) Profit & Loss  
5) Simple interest 6) Compound interest

**Evaluation Procedure**

The course shall have two components of evaluation: a) Continuous evaluation of 30 marks, comprising of quizzes, assignments, etc.; b) Practical/ study project-20 marks.

*SB*

Head of the

Department

*Relana*

IQAC

Co-ordinator

  
Principal  
TTWRDC(W) SIRICILLA  
Dist: Rajanna Sircilla

Principal

## Department of Mathematics

2022-23

### Value Added Courses

**Title:** Arithmetic Ability

**Course Code:** VACMAT003

**Course Outcomes:**

Course outcomes for an arithmetic ability course for degree students might include

**1. Number System:**

- Understanding of different types of numbers including natural numbers, whole numbers, integers, rational numbers, and irrational numbers.
- Proficiency in performing operations (addition, subtraction, multiplication, division) within different number systems.
- Ability to convert numbers between different forms (e.g., fractions to decimals, decimals to percentages).

**2. Ratio and Proportion:**

- Mastery in solving problems involving ratios and proportions in various contexts such as mixing ingredients, scaling, and financial applications.
- Understanding of the relationship between ratios, proportions, and fractions.
- Ability to apply ratios and proportions to solve real-world problems, including problems involving rates and unit conversions.

**3. Averages:**

- Proficiency in calculating different types of averages including mean, median, and mode.
- Ability to interpret and analyze data using averages.
- Skills in applying averages to solve problems related to data interpretation, statistics, and everyday scenarios.

**4. Percentages:**

- Understanding of percentages as a concept representing a portion of a whole.
- Proficiency in calculating percentages, including percentage increase/decrease, percentage of a number, and percentage error.
- Ability to apply percentages to solve problems related to taxes, discounts, markups, and other financial calculations.

**5. Interest:**

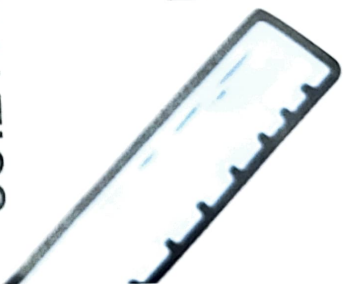
- Understanding of simple interest and compound interest calculations.

2021-2022

16-8-2021



# TTWRDC(W); Rajanna Siricilla



DEPARTMENT OF MATHEMATICS

Value Added Course

Course Name: Reasoning Ability

Eligibility: MPC & MPCs (All Years)

Last Date for Application: 20-8-2021

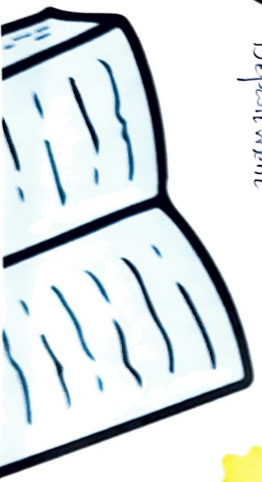
Course Duration: 23-8-2021 To 29-9-2021

Exam Date: 03-10-2021

*BLG*  
Head of the  
Department

*Rajana*  
TQAC  
co-ordinator

*RA*  
Principal  
TTWRDC(W),SIRICILLA  
Dist: Rajanna Siricilla



TTWRDC(W), THANGALLAPALLY, RAJANNA SIRICILLA  
DEPARTMENT OF MATHEMATICS  
VALUE ADDED COURSE

Title: Reasoning ability

course code: VACMAT015

Teaching hours:30 Hrs

Syllabus


- ◆ Analogy
- ◆ Classification
- ◆ Coding & Decoding
- ◆ Series
- ◆ Blood Relations
- ◆ Directions

Evaluation procedure:

Total marks: 50 M

Theory exam: 40M

Assignments: 10M

  
Head of the  
Department

  
Principal  
TTWRDC(W)SIRICILLA  
Dist: Rajanna Siricilla

PRINCIPAL

**Department of Mathematics**  
**2021-22**  
**Value Added Courses**

**Title:** Reasoning Ability

**Course Code:** VACMAT015

**Course Outcomes:**

Course outcomes for an Reasoning ability course for degree students might include:

**1. Analogy:**

- Understand the relationship between different pairs of words or concepts.
- Identify analogous relationships and apply them to new situations.
- Develop critical thinking skills by recognizing similarities and differences.

**2. Classification:**

- Learn to categorize objects, words, or concepts based on common attributes or characteristics.
- Enhance logical reasoning skills by identifying patterns and organizing information.
- Practice problem-solving techniques by classifying items into appropriate groups.

**3.Coding & Decoding:**

- Acquire proficiency in deciphering codes and ciphers through systematic analysis.
- Improve analytical skills by identifying patterns or rules governing coded messages.
- Develop logical thinking abilities by encoding and decoding information using various techniques.

**4.Series:**

- Enhance pattern recognition skills by identifying sequences and progressions.
- Develop problem-solving strategies by extrapolating patterns to predict the next elements in a series.
- Strengthen logical reasoning abilities by analyzing the relationships between series elements.

**5.Blood Relations:**

- Understand familial relationships and kinship structures.
- Enhance deductive reasoning skills by solving problems involving family trees and genealogies.
- Improve critical thinking abilities by applying logic to determine relationships between individuals.

**6. Directions:**

- Develop spatial reasoning skills by interpreting directions and orientations.
- Enhance problem-solving abilities by navigating through maps and spatial arrangements.
- Improve logical thinking skills by understanding and applying directional concepts in various contexts.



Head of the  
Department

## NOTICE

### DEPARTMENT OF Mathematics

DATE: 28/08/2020

Here by informing all the interested students to enroll in the certificate courses

**"Reasoning Ability"** conducting by the Department of Mathematics for the academic year **2020-21** which is going to start from **DI: 04/09/2020**. Those who are interested can apply.

**COURSE NAME:** Reasoning Ability

**ELIGIBILITY:** MPC & MPCs(All years)

**LAST DATE FOR APPLICATION:** 01/09/2020

**COURSE DURATION FROM:** 04/09/2020 TO 09/10/2020

**EXAM DATE:** 12/10/2020



Principal  
TTWRPQW/SIRCILLA  
Dist: Rajanna Sircilla

PRINCIPAL

DEPARTMENT OF Mathematics



TTWRDC(W), THANGALLAPALLY, RAJANNA SIRICILLA  
DEPARTMENT OF MATHEMATICS

VALUE ADDED COURSE

DATE-

Title: Reasoning ability

course code: VACMAT015  
Syllabus

Teaching hours: 30 Hrs

- ◆ Analogy
- ◆ Classification
- ◆ Coding & Decoding
- ◆ Series
- ◆ Blood Relations
- ◆ Directions

Evaluation procedure:


Total marks: 50 M

Theory exam: 40M

Assignments: 10M

  
Principal  
TTWRDC(W)/SIRICILLA  
Distt. Rajanna siricilla

PRINCIPAL

  
Head of the  
Department

## Department of Mathematics

2020-21

### Value Added Courses

**Title:** Reasoning Ability

**Course Code:** VACMAT015

**Course Outcomes:**

Course outcomes for an Reasoning ability course for degree students might include:

#### 1. **Analogy:**

- Understand the relationship between different pairs of words or concepts.
- Identify analogous relationships and apply them to new situations.
- Develop critical thinking skills by recognizing similarities and differences.

#### 2. **Classification:**

- Learn to categorize objects, words, or concepts based on common attributes or characteristics.
- Enhance logical reasoning skills by identifying patterns and organizing information.
- Practice problem-solving techniques by classifying items into appropriate groups.

#### 3. **Coding & Decoding:**

- Acquire proficiency in deciphering codes and ciphers through systematic analysis.
- Improve analytical skills by identifying patterns or rules governing coded messages.
- Develop logical thinking abilities by encoding and decoding information using various techniques.

#### 4. **Series:**

- Enhance pattern recognition skills by identifying sequences and progressions.
- Develop problem-solving strategies by extrapolating patterns to predict the next elements in a series.
- Strengthen logical reasoning abilities by analyzing the relationships between series elements.

#### 5. **Blood Relations:**

- Understand familial relationships and kinship structures.
- Enhance deductive reasoning skills by solving problems involving family trees and genealogies.
- Improve critical thinking abilities by applying logic to determine relationships between individuals.

**6. Directions:**

- Develop spatial reasoning skills by interpreting directions and orientations.
- Enhance problem-solving abilities by navigating through maps and spatial arrangements.
- Improve logical thinking skills by understanding and applying directional concepts in various contexts.



Head of H2E  
Department

## NOTICE

### DEPARTMENT OF Mathematics

DATE: 03/09/2019

Here by informing all the interested students to enroll in the certificate courses

“Arithmetic Ability” conducting by the Department of Mathematics for the academic year 2919-20 which is going to start from **Dt: 09/09/2019**. Those who are interested can apply.

**COURSE NAME:** Arithmetic Ability

**ELIGIBILITY:** 2nd year Physical Science

**LAST DATE FOR APPLICATION:** 07/09/2019

**COURSE DURATION FROM:** 09/09/2019 **TO** 29/11/2019

**EXAM DATE:** 02/12/2019



**Principal**  
TTW/RDC (M) SRIC/11A  
DISE: Rajanna Sirchilla  
PRINCIPAL

DEPARTMENT OF MATHEMATICS


TTMRDQ(W), THANGALLAPALLY, RAJANNA SIRICILLA  
DEPARTMENT OF MATHEMATICS  
VALUE ADDED COURSE


Title: ARITHMETIC ABILITY  
course code: VACMAT003

Syllabus:  
Arithmetic Ability : 1) Number System 2) Ratio & Proportion 3) Averages 4) Percentages 4) Profit & Loss  
5) Simple interest 6) Compound interest

**Evaluation Procedure**

The course shall have two components of evaluation: a) Continuous evaluation of 30 marks,  
comprising of quizzes, assignments, etc.; b) Practical/ study project-20 marks.

  
Head of the  
Department

  
Principal  
TTMRDQ(W) SIRICILLA  
Dist: Rajanna Sircilla  
Principal

**Department of Mathematics**  
**2019-20**  
**Value Added Courses**

**Title:** Arithmetic Ability

**Course Code:** VACMAT003

**Course Outcomes:**

Course outcomes for an arithmetic ability course for degree students might include

**1. Number System:**

- Understanding of different types of numbers including natural numbers, whole numbers, integers, rational numbers, and irrational numbers.
- Proficiency in performing operations (addition, subtraction, multiplication, division) within different number systems.
- Ability to convert numbers between different forms (e.g., fractions to decimals, decimals to percentages).

**2. Ratio and Proportion:**

- Mastery in solving problems involving ratios and proportions in various contexts such as mixing ingredients, scaling, and financial applications.
- Understanding of the relationship between ratios, proportions, and fractions.
- Ability to apply ratios and proportions to solve real-world problems, including problems involving rates and unit conversions.

**3. Averages:**

- Proficiency in calculating different types of averages including mean, median, and mode.
- Skills in applying averages to solve problems related to data interpretation, statistics, and everyday scenarios.

**4. Percentages:**

- Understanding of percentages as a concept representing a portion of a whole.
- Proficiency in calculating percentages, including percentage increase/decrease, percentage of a number, and percentage error.
- Ability to apply percentages to solve problems related to taxes, discounts, mark-ups, and other financial calculations.

**5. Interest:**

- Understanding of simple interest and compound interest calculations.
- Proficiency in calculating interest rates, principal amounts, and total amounts accrued over time.



Head of the

Department