**MATHEMATICS**

**JUNIOR SECONDARY SCHOOL (JSS 1)**

**FIRST TERM**

**WEEK TOPICS/CONTENTS**

**1. WHOLE NUMBERS COUNTING WRITING**

I. Millions

 II. Billions

 III. Trillions

**2. WHOLE NUMBERS COUNTINUED**

Problems Solving in Quantitative Aptitude Reasoning Using Large Numbers

**3 LOWEST COMMON MULTIPLE (L.C.M.) AND HIGHEST COMMON MULTIPLE (H.C.F.) OF WHOLE**

**NUMBERS**

I. Concepts of L.C.M. and H.C.F.

 II. L.C.M. and H.C.F. by Inspection and by Formulae

 III. L.C.M. and H.C.F. of Quantitative Reasoning

**4. FRACTIONS**

 I. Meaning of Fraction

 II. Types of Fractions (Proper and Improper Fractions)

 III. Mixed. Number

**5. FRACTIONS COUNTINUED**

Equivalent fractions identify and apply equivalent fractions in showing commodities and

problems solving in quantitative.

**6. FRACTIONS COUNTINUED**

 I. Ordering of Fractions

 II. Conversion of Fractions to Percentages and Vice Versa

 III. Conversion of Fractions to Decimal to Decimal and Vice Versa

**7. REVIEW OF THE FIRST HALF TERM’S WORK AND PERIODIC TEST**

**8. FRACTIONS COUNTINUED**

Addition and Subtraction of Fractions

**9. FRACTIONS COUNTINUED**

 I. Multiplication and Division of Fractions

 II. Prime Numbers and Factors

**10. ESTIMATED**

 I. Concept of Estimation and Reasons

 II. Estimation of Dimensions and Distance

 III. Estimation of Capacity Volumes and Mass of Objects

 IV. Estimation of Other Things e.g. Age, Time, etc.

 V. Quantitative Reasoning Involving Estimation.

**11. REVISION OF THE FIRST TERM’S WORK AND PREPARATION FOR THE FIRST TERM EXAMINATION**

**12. – 13. FIRST TERM EXAMINATION**

**MATHEMATICS**

**JUNIOR SECONDARY SCHOOL (JSS 1)**

**SECOND TERM**

**WEEK TOPICS/CONTENTS**

**1. REVISION OF FIRST TERM’S WORK**

Emphasize on Identified Difficult Areas Base on the Performance of first term

Examination

**2. APPROXIMATION**

I. Degree of accuracy of numbers and how to determine it.

II. Rounding – Up of Numbers, Significant, Figures, Decimal Places, Nearest Whole Numbers,

Tens, Hundreds and Thousands

III. Rounding – up of numbers to nearest tenth, hundredth and thousandth.

**3. APPROXIMATION COUNTINUED**

 I. Approximating Values of Addition, Subtraction, Multiplication and Division

 II. Exercise on Degree of Accuracy Round – Up Numbers

 III. Problems solving on Quantitative Reasoning and Approximating Things in Everyday

Activities

**4. NUMBER BASE**

I. Counting in base two

II. Conversion of Base 10 Numerals to Binary Numbers

III. Addition and Subtraction of Two or Three – 3 Digits Binary Numbers

**5. NUMBERS BASE COUNTINUED**

I. Multiplication of Two 2 – Digit Binary Numbers

II. Problems Solving on Quantitative Aptitude related to Conversion and Application to Real

Life Situation

**6. BASIC OPERATIONS**

I. Addition and Subtraction of Numbers Emphasize on Place Values using Spike or Abacus

II. Addition and Subtraction of Numbers Emphasis on the Use Number Line

**7. REVIEW OF FIRST HALF TERM’S WORK AND PERIODIC TEST**

**8. BASIC OPERATIONS COUNTINUED**

 I. Addition and Subtraction of Positive and Negative Integers using Number Line and

Collection of Terms

 II. Everyday Application of Positive and Negative Integers

 III. Solving Problems on Quantitative Reasoning in Basic Operations

**9. ALGEBRAIC PROCESSES**

 I. Use of Symbols

* Open sentences and authentic operation
* Word Problems Involving Use of Symbols.

 II. Identification of Coefficient of Terms Basic Authentic Operations Applied to algebraic

Expressions

 III. Collection and simplification of like terms and the use of brackets.

**10. ALGEBRAIC PROCESSES COUNTINUED**

 I. Problem Solving on Basic Arithmetic Operations in Algebraic Processes

 II. Solving Quantitative Aptitude Problems on the use of Symbols and Brackets

**11. REVISION OF THE SECOND TERM’S WORK AND PREPARATION FOR EXAMINATION**

**12. – 13. EXAMINATION AND VACATION**

**MATHEMATICS**

**JUNIOR SECONDARY SCHOOL (JSS 1)**

**THIRD TERM**

**WEEK TOPICS/CONTENTS**

**1. REVISION OF SECOND TERM’S WORK WITH EMPHASIS ON IDENTIFIED DIFFICULT AREAS IN**

**SECOND TERM EXAM**

**2. SIMPLE EQUATION**

 I. Translation of Work Problem into Equation and Vice Versa

 II. Use of Balance or Sea Saw to Demonstrate the Principles of Equality

 III. Solution of Simple Equations

**3. GEOMETRY – PLANE – SHAPES**

I. Types of Plane Shapes and their properties

 II. Similarities and differences between the following – Squares, Rectangular, Triangle,

Trapezium, Parallelogram and Circle

**4.** **GEOMETRY – PLANE – SHAPES**

I. Perimeter of Regular Polygon, Square, Rectangle, Trapezium, Parallelogram and Circle.

 II. Area of regular plane shapes such as: squares, rectangles, parallelogram, etc.

**5. THREE. DIMENSIONAL SHAPES**

 I. Identification of Three Dimensional or 3D Shapes

 II. Basic Properties of Cubes and Cuboid

 III. Basic Properties of Cylinders and Spheres

 IV. Volume of Cubes and Cuboid

**6. ANGLES IDENTIFICATION AND PROPERTIES OF ANGLES**

 I. Vertically Opposite Angles

 II. Adjacent Angles

 III. Alternate Angles

 IV. Corresponding Angles

**7. ANGLES COUNTINUED**

**THEOREMS**

 I. Sum of Angles on a Straight Line

 II. Supplementary Angles

III. Complementary Angles

IV. Sum of Angles of a Triangle

**8. CONSTRUCTION**

 I. Construction of Parallel and Perpendicular Lines

 II. Bisection of a given Line Segment

 III. Construction of Angles 90 and 60 degree.

**9. STATISTICS I**

 I. Definition, Purpose and Usefulness of Statics

 II. Data Collection, Sources and Importance

 III. Presentation and Analysis of Data Frequency Distribution

**10. Graphical Presentation of Data**

The use of Bar Chart, Pie Chart and Histogram

**11. STATISTICS II**

Measure of Average

I. The Arithmetic Mean

II. The mean

III. The mode

**12. REVISION AND TEST**

**13. EXAMINATION**