FORM II

UNIT 1

Unit No.	Basic Content/Objectives	Detailed Content		Time Ratio	Notes on Teaching
1	**Rate, ratio and proportion** *Objectives:* To develop the ability in the use of rate, ratio and proportion in problems connected with everyday life.	1.1	Meaning of rate, ratio and proportion.	3	Students are expected to understand clearly the meaning of rate, ratio and proportion through using everyday examples such as walking rate, reduction rate and the ratio of the number of boys to that of girls in a class. These examples should lead students to see their relationship.
		1.2	The notion of a two term ratio $a : b$ or $\frac{a}{b}$ where $b \neq 0$.	2	The notion of a two-term ratio $a : b$ is introduced. This can be represented by the fraction $\frac{a}{b}$ where $b \neq 0$. Students should note that a ratio is unaltered if the two numbers (or quantities) of the ratio are both multiplied or divided by the same number. The notion of a two-term ratio may be extended to a three-term ratio or more, e.g. $a : b : c = 1 : 2 : 3$.
		1.3	Examples from science and mensuration including similar triangles. Problems on direct and simple inverse proportion. Graphs in two variables.	6	Students should be able to deal with rate, ratio and proportion in examples from science and mensuration, including similar triangles. Practical problems on direct and simple inverse proportion should also be investigated. (N.B. Maps and scale plans are common examples of proportion.) Students may use graphs to see the relationship between two quantities.
				11	

FORM II

UNIT 2

Unit No.	Basic Content/Objectives	Detailed Content		Time Ratio	Notes on Teaching
2	**Angles of triangles and polygons** *Objectives:* (1) To investigate the basic properties of triangles. (2) To extend from simple to many-sided figures, particularly those occur in everyday life and those tessellate.	2.1	The angle sum of the interior angles of a triangle is 180°.	3	This has been introduced in 3.3 in Form I. By now students are expected to arrive at the same result using alternate and adjacent angles. Suffix notation is recommended as this helps to clarify the reasoning.
		2.2	The exterior angle of a triangle is equal to the sum of the two opposite interior angles.	3	This can be illustrated by cutting out a triangle, tearing off the two interior angles and fitting them over or into the exterior angle. The proof follows easily from the angle sum and adjacent angles. Throughout this unit, when numerical calculations are considered, simple numbers should be used so that if students understand the reasoning and method, the question can be done quickly. Initially, some questions may be answered orally (in which case each student should write down the answer).
		2.3	The use of small letters x, y, z, etc. to denote angles in a diagram.	4	Students should be encouraged to set out their work in a clear, logical and economical way. Rather than writing out the given, this should be marked in ink upon the diagram. Letters used for deduction should be marked in pencil on the diagram to differentiate them from those used for the given. Reasons should be given for all deductive steps but these should be kept brief and a system of abbreviations should be agreed upon, e.g. alt. ∠s for alternate angles.
		2.4	Polygons: interior and exterior angles of a polygon. Calculation of angles in a polygon by using the formulae: $\sum i = (2n-4)\text{rt.}\angle\text{s}$, $\sum e = 360°$.	7	This can be illustrated by dividing the polygon into triangles and, if necessary, cutting them out. Another method that can be used as soon as the sum of the exterior angles has been shown to be 4 right angles is to show that the sum of the exterior and interior angles is $2n$ right angles, hence the sum of the interior angles is $(2n - 4)$ right angles. With the exterior angles of a polygon, the most obvious illustration is cutting out the exterior angles and putting them together to form 4 right angles. (Some students may find it

UNIT 2

Unit No.	Basic Content/Objectives	Detailed Content	Time Ratio	Notes on Teaching
2				difficult to visualize a pencil turning through each exterior angle taken in turn makes a complete revolution. But of course this is quicker.) If the polygon is regular, and hence the exterior angles are all equal, we can easily obtain a formula for finding the size of each exterior angle. Also, if names are used for polygons, it is a good idea to quote the number of sides e.g. hexagon (6). When the formula work has been established, questions should be given in order to connect this topic with previous work. On its own it is merely an exercise in substitution. Construction of regular polygons using any kind of equipment. In some cases it may be necessary to calculate angles and then use a protractor. Tessellation should be introduced informally as a form of tiling. Students should be shown how to decide whether a particular regular polygon tessellates. They should then discover which polygons tessellate and why they do so. These results should then be confirmed by constructing small pieces of tiling from the polygons, just large enough to show that the polygon concerned tessellates.
			17	

UNIT 3

Unit No.	Basic Content/Objectives	Detailed Content	Time Ratio	Notes on Teaching
3	**Approximation** *Objectives:* To understand the ideas of rounding off and significant figures.	3.1 Idea of rounding off.	2	A revision on the proper choice of units for measurement should precede the discussion on rounding off numbers. Students should know that numbers are rounded off for various reasons: for ease of reference or remembering or as a result of using inaccurate measuring instruments. The idea of rounding off should be illustrated, such as follows: If we use a ruler marked in tenths of centimetres, we can find the width of a sheet of paper, say 14.2 cm to the nearest tenth centimetre or 14 cm to the nearest centimetre. A sum of $2 578 spent on workers' welfare in a certain firm might well be rounded off to the nearest thousand dollars as $3000 just for convenient reference. What is this sum of money when rounded off to the nearest (a) hundred dollars, (b) ten dollars? The number of children in a certain new estate is 3 864. To make it easy to remember the number might be rounded off to the nearest thousand as 4 000. What would it be to the nearest hundred?
		3.2 Significant figures.	2	Sometimes we round off numbers so that we can concentrate on the most important or significant digits. In the numbers 28.1 and 0.028 1, which digit is the most significant? The most significant digits are always those whose place values are the greatest, that is, those on the left. The "2" is more significant than the "8" and the "8" is more significant than the "1" in the above examples. When a number is given, it may be possible to tell the number of significant figures. For example, in a number like 0.0304 the first two zeros are not significant but the third is. Thus 0.030 4 has three significant figures "3", "0" and "4", Also in a number like 17500 (corrected to the nearest 10), it has four significant figures, namely "1", "7", "5" and "0", but the last "0" is not significant. To further the idea of significant figures, students should be encouraged to use them in practice and some examples should be considered. If the population of a new town is 287 850, it is good enough if we take it as 300 000. If you wanted more accuracy,

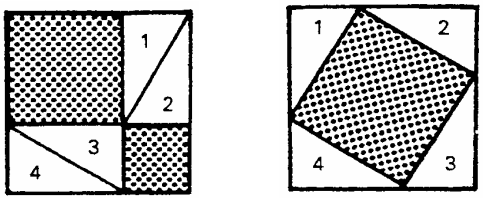
FORM II

UNIT 3

Unit No.	Basic Content/Objectives	Detailed Content	Time Ratio	Notes on Teaching
3				you could use two significant figures and give the population as 290 000. A flat is for sale at $645 700. A rich man might well think in hundred thousands of dollars. To him there is only one significant figure, the “6” in $600 000. A poorer man might worry about the hundreds of dollars. To him, there are four significant figures “6”, “4”, “5” and “7” in $654 700.
			4	

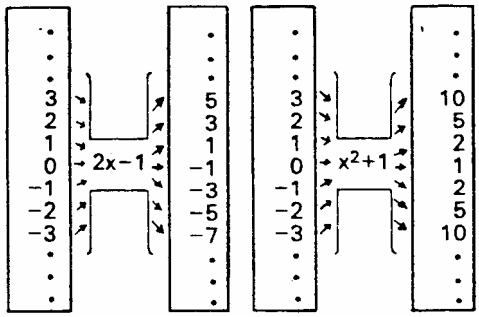
FORM II

UNIT 4

Unit No.	Basic Content/Objectives	Detailed Content	Time Ratio	Notes on Teaching
4	**Pythagoras’ Theorem: use of square root tables** *Objectives:* (1) To apply the Pythagoras’ Theorem in solving problems. (2) To see the importance of Pythagoras’ Theorem in the study of coordinate geometry and other topics. (3) To use the square root tables.	4.1 Illustration of the veracity of Pythagoras’ Theorem.	2	There are over three hundred proofs of Pythagoras’ Theorem. However, the following illustration based upon equivalent areas obtained by the difference between a fixed square and four movable triangles is helpful. 
		4.2 Use of square root tables.	2	Use of the square root tables may be introduced through finding the length of an unknown side of a given right-angled triangle. A list of squared integers up to 20^2 is useful, as this gives the approximate value of any square root up to 400. This enables students not only to locate the decimal point but also to choose between the following type of alternatives when using the square root tables, e.g. $\sqrt{300} = 10\sqrt{3}$ and not $10\sqrt{30}$. Pairing off the digits and finding the square root of the first pair or first single digit confirms the first digit in the answer and shows which of the two alternatives to be selected from the tables.
		4.3 Application of Pythagoras’ Theorem.	5	Simple calculations involving Pythagoras’ Theorem should be introduced through applications such as carpentry. Application of the Theorem in simple problems in coordinate geometry and other topics should be discussed.
			9	

FORM II

UNIT 5

Unit No.	Basic Content/Objectives	Detailed Content		Time Ratio	Notes on Teaching
5	**Polynomials** *Objectives:* (1) To obtain a preliminary idea of a function. (2) To be familiar with techniques of handling polynomials.	5.1	From monomials to polynomials – viewed as number-producing machines.	3	This is an extension of Unit 9 in Form I where students had experience in dealing with monomials. Students should understand how a polynomial is built up from a monomial (a link with Unit 14 in Form I where students dealt with collection of terms in an expression). To prepare students for the idea of functions in later work, teachers can emphasize one of the characteristics of polynomials, i.e. when the variables in a polynomial are assigned certain values, the value of the polynomial is determined. The correspondence is one to one or many to one but never one to many. Diagrams such as the following can be drawn to illustrate this point.  Students should know what is meant by the degree of a polynomial and be able to arrange the terms of a polynomial in ascending or descending order. However, it is not recommended that terms such as “domain”, “range”, “image”, “mapping”, etc. be introduced, as these terms are likely to confuse students at this stage.

FORM II

UNIT 5

Unit No.	Basic Content/Objectives	Detailed Content		Time Ratio	Notes on Teaching
5		5.2	Simple operations with polynomials.	4	Here the emphasis is on manipulative skills. Many worked examples should be shown before asking students to attempt the working. In any case the most complicated polynomials considered should not go beyond trinomials (perhaps, for high ability groups, polynomials of more than 3 terms can be attempted). Long divisions like $(x^2+3x-1)\div(x-1)$ can be considered and students should get used to the idea of having a remainder when exact division is not possible.
		5.3	Factorization of polynomials by grouping terms.	6	Only the method of grouping terms needs to be considered here as preparation work for solving simple equations. While the general rule for grouping terms may be explained, it is not essential that students should commit the rule to memory. Students usually have their favourite means of spotting the factor or the terms that need to be grouped together, if they are given enough practice. As a check to see whether the factorization is correct, students can work out the product either in their mind or on rough paper.
		5.4	Simplication of algebraic fractions.	5	Finding the L.C.M. of two numbers should be reviewed (and perhaps the H.C.F. as well, though this is not required in this sub-unit). Students should be led to see the similarity between $\frac{2}{3}-\frac{3}{7}$ and $\frac{2b-1}{3a}-\frac{4b+2}{7a}$ the latter being an extension of the former. Once this is established, more complicated algebraic fractions can be attempted.

FORM II

UNIT 6

Unit No.	Basic Content/Objectives	Detailed Content		Time Ratio	Notes on Teaching
6	**The sine, cosine and tangent ratios** *Objectives:* (1) To know the meaning and significance of some trigonometric ratios. (2) To use the tables for these ratios. (3) To apply these ratios in solving right-angled triangles. (4) To solve problems reducible to right-angled triangles.	6.1	Introducing the sine, cosine and tangent ratios for angles in $0° < \theta < 90°$.	4	The word "trigonometry" may be new to students. It is concerned with the measurement of angles. Teachers may consider the unit circle with its centre at the origin of a rectangular coordinate system. If P is a point on the circumference and GP makes an angle θ with the positive *x*-axis ($0° < \theta < 90°$), then for any specific value of θ, the *x*- and *y*-coordinates of P respectively give the cosine and sine ratios for the angle θ. A table with integral values of θ and the corresponding values of cosine and sine may be set up by students as an activity in class. The tangent ratio for the angle θ is given by the ratio of the *y*-coordinate to the *x*-coordinate of the point P. Students can then add the corresponding values of tangent to the tables they have set up.
		6.2	Use of trigonometric tables.	3	For angles such as 35.5°, students may need trigonometric tables. Sufficient practice in looking up values from tables is essential. Although calculators may be used, students are advised to know how to use the trigonometric tables. At this stage, the angles are restricted to less than 90°.
		6.3	Solution of practical problems reducible to right-angled triangles.	6	After some practice with the sine, cosine and tangent ratios, students should be guided to solve practical problems using right--angled triangles and trigonometric tables. Teachers may find examples from the measurement of inaccessible heights and distances such as the height of a tower or a tree, the distance between two cities and so forth. Emphasis here is on the discussion on ways of solving problems. Practical activities using simple surveying instruments should be conducted only when students are capable of mastering the trigonometric skills of problem-solving techniques.
				13	

FORM II

UNIT 7

Unit No.	Basic Content/Objectives	Detailed Content		Time Ratio	Notes on Teaching
7	**Trigonometric relations** *Objectives:* (1) To learn simple trigonometric identities. (2) To learn the trigonometric ratios of special angles.	7.1	Introducing the relations $\sin(90° - \theta) = \cos\theta$ $\cos(90° - \theta) = \sin\theta$ $\tan(90° - \theta) = \frac{1}{\tan\theta}$ $\tan\theta = \frac{\sin\theta}{\cos\theta}$ $\sin^2\theta + \cos^2\theta = 1$.	4	Teachers should prove the identities $\sin(90° - \theta) = \cos\theta$, $\cos(90° - \theta) = \sin\theta$ and $\tan(90° - \theta) = \frac{1}{\tan\theta}$. Exercises involving these identities should be given. Students may verify $\tan\theta = \frac{\sin\theta}{\cos\theta}$ and $\sin^2\theta + \cos^2\theta = 1$ by measurement, calculators or trigonometric tables. This can be treated as an exercise for students. Teachers should then prove them using trigonometric ratios and the Pythagoras' Theorem. It should also be noted that with these two identities if anyone trigonometric ratio of an angle is given, it is possible to calculate the value of any other ratio of that angle without using tables.
		7.2	Trigonometric ratios of special angles: 30°, 45°, 60°.	2	It is useful to introduce the trigonometric ratios of a few special angles. By using the Pythagoras' Theorem together with a right-angled isosceles triangle and an equilateral triangle, students should be able to obtain the trigonometric ratios of 30°, 45°, 60° and use them in radical form. Abler students may be shown a treatment of the trigonometric ratios for 0° and 90°.
				6	

FORM II

UNIT 8

Unit No.	Basic Content/Objectives	Detailed Content		Time Ratio	Notes on Teaching
8	**Use of formulae** *Objectives:* (1) To appreciate the power of algebraic skills in comparison with arithmetic skills. (2) To practise the handling of literal relations.	8.1	Change of subject (radicals may be used).	5	A student who can transform formulae with three or four variables to obtain any assigned variable has a competent knowledge of the use of formulae of simplifying expressions, of simple factorization method and of the solution of simple literal equations. Work in this unit should therefore be linked with these topics. Successful teaching of this unit often lies on the careful grading of examples so that each technique is mastered before the next is presented. The first transformations should be those of formulae containing two variables and these formulae should either be thoroughly familiar to or easily appreciated by students. An easy example is $S = 2N - 4$ rt.$\angle$ (angle sum of a polygon); a harder example is $C = \frac{5}{9}(F - 32)$. One or two numerical illustrations may be worked on before the general transformation is attempted. From the outset it must be emphasized that the variable required must appear isolated on one side of the final statement. Students should not be discouraged from mastering the basic techniques of formulae transformation by being exposed to formulae which are too difficult for them to manipulate.
		8.2	Application of formulae: the method of substitution.	4	At this stage, students may have come across some formulae in their physics and chemistry lessons. Teachers are advised to look into students science course books for meaningful formulae both as examples or as exercises.
				9	

FORM II

UNIT 9

Unit No.	Basic Content/Objectives	Detailed Content		Time Ratio	Notes on Teaching
9	**More about coordinates** *Objectives:* To learn the distance and slope formulae, and to understand further the idea of geometry as an algebraic structure.	9.1	Distance.	3	This unit follows directly from 8.2 in Form I and illustrates one of the many applications of Pythagoras' Theorem. Initially points should be chosen so that the horizontal and vertical distances between them form the sides of a Pythagorean triangle such as the rope stretchers' triangle (3, 4, 5). When students are sure of the principle involved, any two points can be taken and this will give practice in using the square root tables. At this stage the generalized points (x_1, y_1) and (x_2, y_2) can be introduced and the formula obtained. With some classes, students may be able to do this themselves as an exercise.
		9.2	Gradient.	3	This idea of slope, i.e. gradient $= \frac{y_1 - y_2}{x_1 - x_2}$ for the line L passing through (x_1, y_1) and (x_2, y_2) should be discussed, noting that the gradient is independent of whichever point is taken first. Students should then consider both positive and negative gradients but compare only the positive gradient with tan θ (0° < θ < 90°) where θ is the angle that the line L makes with the x-axis. The negative gradient will be compared later when the general angle is developed. Students should discover that parallel lines have the same slope. For abler students, the two cases when lines are parallel to the axes may be discussed. They may also discover from examples that the product of slopes of perpendicular lines is –1. The proof is not required at this stage.
				6	

FORM II

UNIT 10

Unit No.	Basic Content/Objectives	Detailed Content		Time Ratio	Notes on Teaching
10	**Circle. rectangular block, prism and cylinder** *Objectives:* (1) To investigate ways of finding the circumference and area of a circle. (2) To find the length of an arc and area of a sector. (3) To solve practical problems on surface areas and volumes of solids.	10.1	Circumference of a circle. The approximate value of π. Length of an arc.	3	This is essentially a revision topic. Students should be encouraged to measure in metric units the circumferences and diameters of many circular objects such as tins, bottles and anything else with a circular cross-section. They can also draw a set of circles with the radius doubled each time. Teachers should guide students to discover whether a relation exists between the lengths of the diameter and the circumference. Statistical charts could be of some use to illustrate this relation. Students are expected to find the approximate value of the ratio. It may be of interest to introduce a brief history of the calculation of π. Length of an arc can be found as a fraction of the circumference using the ratio of the measures of the angles at the centre.
		10.2	Area of a circle and area of a sector.	3	Students may investigate the area of a circle by dissecting a circle into an even number of very small sectors in order to form a figure that approximates a parallelogram with base nr and height rand hence of area πr^2. The formula for the area of a circle can therefore be deduced, In calculating the area of a sector, students can be shown pie charts and led to calculate the areas of a quarter, half, three quarters and any sector of a circle using the ratio of the measures of the angles at the centre and hence the fraction of the area of the circle.
		10.3	Surface areas and volumes of rectangular block, prism and cylinder.	5	Volumes of solids with uniform cross-sections have been dealt with in Form I. To provide further practice, teachers should arouse students' interest by investigating various daily examples such as the volume of water in a swimming pool, water flow in a cylindrical pipe, increase in depth of liquid in a vessel when a solid is immersed.

FORM II

UNIT 10

Unit No.	Basic Content/Objectives	Detailed Content		Time Ratio	Notes on Teaching
					Students should have no difficulty in calculating surface areas as it is a process of adding up area of triangles, rectangles, squares or circles. However, for high ability groups, it is challenging to investigate the relations between lengths, areas and volumes of similar objects.
				11	

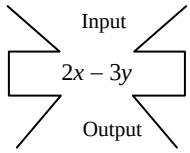
FORM II

UNIT 11

Unit No.	Basic Content/Objectives	Detailed Content		Time Ratio	Notes on Teaching
11	**Using percentages** *Objectives:* To use percentages to solve everyday problems.	11.1	Simple interest using direct proportion and the simple interest formula. Inverse problems on simple interest.	3	To study this topic, students should understand terms such as "Principal", "Rate", "Time" (in years), "Interest" and "Amount". It seems that a table showing corresponding values of the above-mentioned items will best illustrate the fact that the simple interest is proportional to time. After some practice, students should discover the simple interest formula and make use of the formula in inverse problems.
		11.2	Compound interest as repeated simple interest.	3	Students should be led to discover the difference between simple and compound interest. They are expected to calculate compound interest through the repeated simple interest method. Teachers may find it easier to indicate step by step the method for computing compound interest in a tabular form. In some cases, it is advisable to obtain a rough estimate by calculating the simple interest for comparison.
		11.3	Knowledge of fixed deposit account.	2	In introducing compound interest teachers may have already mentioned fixed deposit accounts in the bank. Interest is usually paid at fixed intervals: yearly, half-yearly or quarterly. For high ability groups, it may be possible to find out how interest is calculated for, say, ten days exceeding a fixed period of three months. For example, bank interest for those days exceeding a fixed period may be calculated on the seven-day-call interest rate.
		11.4	Growth and depreciation.	4	As students are conversant with the calculation techniques involved, problems on growth and depreciation may now be investigated.
				12	

FORM II

UNIT 12

Unit No.	Basic Content/Objectives	Detailed Content		Time Ratio	Notes on Teaching
12	**Simultaneous linear equations in two unknowns** *Objectives:* (1) To practise the algebraic techniques acquired from Unit 9 in Form I and Unit 5 in Form II. (2) To learn how to solve simultaneous linear equations algebraically and graphically.	12.1	Simple algebraic methods: substitution and elimination.	6	This is an extension of Unit 9 in Form I and Unit 5 in Form II. Teachers are advised to refer to these two units before proceeding to this one. As an introduction, a simple linear polynomial in two unknowns can be written down and represented by a machine, thus:  What is the output for an input of $x = 2$ and $y = 1$? (The output is 1.) Several questions of this type can be asked. It will soon be established that once the variables x and y are assigned some definite values, the output value can be readily computed. Can this process be reversed? That is, knowing the output, can we calculate the input? (This is possible with polynomials in one unknown.) It soon becomes evident that with the above example, even though we know the output is –5, it is still not possible to conclude what values have been assigned to x and y. This enables students to see that another machine is needed. If there is another machine: $4x + 3y$ at hand, and assuming the same set of input produces the output 17, then we have $2x - 3y = -5$ and $4x + 3y = 17$ both being true sentences simultaneously. Can the students then guess what the input should be? This leads to the algebraic technique of solving simple simultaneous linear equations.

FORM II

UNIT 12

Unit No.	Basic Content/Objectives	Detailed Content	Time Ratio	Notes on Teaching
12				The method of substitution provides an easy way for solving simultaneous linear equations. To make the work less tedious, it is advisable to choose the equation whose coefficient of *x* or *y* has the smallest absolute value. Equations that are inconsistent or that have no unique solutions should be avoided at this stage. The method of elimination serves as a useful way for solving simultaneous linear equations. In deciding whether to eliminate *x* or *y*, we should choose the one whose coefficients have a smaller L.C.M.
		12.2 Graphical method.	5	To further the idea, graphical method may be used. Students are already quite familiar with coordinates and the idea of the 1- 1 correspondence between a point on the coordinate plane and the ordered pair (*x, y*). Now the simple technique of plotting a graph when an equation is given may be introduced. At this stage, students need only construct a table and plot the graph point by point. No lengthy discussion is necessary. When this is applied to simple simultaneous linear equations, it becomes evident to the students that the point of intersection gives the solution sought. As a further development, teachers may discuss with students cases where the straight lines are parallel or identical.
			11	

FORM II

UNIT 13

Unit No.	Basic Content/Objectives	Detailed Content	Time Ratio	Notes on Teaching
13	**Equations and identities** *Objectives:* (1) To distinguish between equations and identities. (2) To acquire the technique of expanding a binomial.	13.1 Meaning of an identity and the making of simple identities.	4	As a preliminary step, students should understand what is meant by the statement "The equation is satisfied by a certain value of *x*". In other words, the L.H.S. and the R.H.S. of the equation are numerically equal when a particular value is substituted for *x*. Students can then practise checking the roots they obtained for some equations like $\frac{x-1}{3}+4=9-\frac{2}{5}(3x-2)$. However, they should be prevented from proceeding as follows: $\frac{4-1}{3}+4=9-\frac{2(12-2)}{5}$ $\therefore \quad 1+4=9-4$ $\therefore \quad 5=5$ They should be made to realize that as a form of statement this is illogical since we are only checking the answer *x* = 4 and we do not know it is true until the last line. They soon realize that identities are equations which are satisfied by all values of the unknown. Simple identities can then be considered and students should be able to construct some identities of their own, such as $(x-1)(x-2)\equiv x^2-3x+2$, etc.
		13.2 The difference of two squares.	3	Following on from this, students will soon discover the identity $x^2-1\equiv(x-1)(x+1)$ and will accept readily the generalized result of $x^2-y^2\equiv(x+y)(x-y)$.
		13.3 Expansion of $(x\pm y)^2$.	3	This expansion is of great use for later work; hence more practice should be given to ensure that students master the technique.

FORM II

UNIT 13

Unit No.	Basic Content/Objectives	Detailed Content	Time Ratio	Notes on Teaching
13				Expansion of a binomial to the power of 3 or above is rarely required. Nevertheless, it enables students to see the power of generalization. Besides, a discussion on Pascal's triangle is often stimulating and worth-while. Therefore, if time permits, teachers should at least mention the expansion of a binomial to some higher degree.
			10	

FORM II

UNIT 14

Unit No.	Basic Content/Objectives	Detailed Content	Time Ratio	Notes on Teaching
14	**Frequency distribution and its graphical representations**	14.1 Frequency distribution, histograms, frequency polygons and curves.	6	Students should be asked to collect data from their daily experience. Histograms, frequency polygons and curves may be regarded as graphical representations of the frequency distribution.
	Objectives: (l) To learn frequency distributions and cumulative frequency distributions. (2) To construct and to interpret the various graphical representations of the above distributions.	14.2 Cumulative frequency polygons and curves.	5	Similar approaches are then applied to cumulative frequency distributions and cumulative frequency polygons, and curves. It is felt that the significance of and difference between grouped and ungrouped data should be stressed especially where there is a need to group the data in a frequency distribution.
		14.3 Interpretation of the above graphs.	4	Each statistical graph has its own characteristics. Teachers should prepare different types of graphs beforehand for demonstration and use overhead projectors wherever possible. Questions should be asked about the possible conclusions that can be drawn from a graph. Special attention should be paid to the suitability of a graph in providing information and conclusions of a certain type. Emphasis should be laid on interpretation and also the use of graphs for prediction. Further applications of those graphs will be discussed later.
			15	
		Total:	152	