COORDINATING TEACHER’S NAME: NWANAH UCHENNA MADUAKO

SUBJECT: MATHEMATICS

CLASS: SSS 2

TELEPHONE NUMBER OF COORDINATING TEACHER: 08160999003

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| **WEEKS** | **TOPICS** | **CONTENTS** | **BEHAVIOURAL**  **OBJECTIVES** | **PRACTICE QUESTIONS** |
| 1. | Mensuration of solid shapes | i. Frustum of cone  ii. Frustum of pyramid | Students are expected at the end of this topic to able to  1. solve frustum of cone  2. solve frustum of pyramid | 1. A bucket is 12cm in diameter at the top 8cm in diameter at the bottom and 4cm deep. Calculate its volume? ( take π as )  2. A frustum of a pyramid is 16cm square at the bottom, 6cm square at the top, and 12cm high. Find the volume of the frustum?  3. A right pyramid on a base 10m square is 15m high, if the top 6m of the pyramid are removed, what is the volume of the remaining frustum |
| 2. | Geometrical construction (3) | i. Basic construction  ii. Common loci  iii.Construction of loci | Students are expected to be able to  1. Construct simple angles (300,450,600,750,900)  2. Construction of triangles, parallelograms  And trapeziums  3.construction of loci | 1. Construct triangle PQR in which /PQ/= 5.5cm, /QR/=8.5cm and <PQR= 750.  2.Construct triangle ABC such that /AB/= 8cm, /BC/=11cm and /AC/=10cm  3. Use ruler and compasses to construct the parallelogram PQRS in which /QR/=5cm,/ RS/=11cm and <QRS=1350 |
| 3. | Trigonometry angle between 0o and 3600 | i. The general angle  ii. Trigonometrical Ratio  iii. Graph of sine θ, cos θ | Students should be able to  1.locate position of angles within quadrant(s)  2. Resolve triangles using trigonometric ratio  3. plot sine and cosine graph  4. Solve trigonometric equations | Decide which quadrant P lies in ,given that the angle between OP and Ox is  1. +1200  2. -900  3. Solve the following equation  a. 5sinθ= 3 b. 1=4sinθ  c. 20sinθ+11=0  4.Find the values of the following  a. sin3260 b. cos2350 |
| 4. | Averages, standard deviation and variance | i. The mean  ii. Averages rates  iii. Mixtures  iv. Median and mode  v. Comparison of mean, median and mode  vii. Standard deviation and variance | Students should be able to  1. find the mean value of an observation or data  2. find mode and median of a data  3. make comparison of result from mode median and mean  4.find standard deviation and variance of a distribution | Given that shoe sizes of 12 maths teachers are 30,32,45,34,34,34,45,45,36,23,34,30  1. Calculate the mode  2. the median and the mean  3.Calculate the standard deviation  4. Calculate the variance  5. The average age of students is 16years and their ages are 14, 12, 11 and x. What is the total ages |