An Analysis of the Five Most Used Numerals and a Proposal for the Adoption of a Universally Acceptable Numeral (UAN)

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Abstract—An analysis of the five most used numerals and a proposal for the adoption of a Universally Acceptable Numerals (UAN), came up as a result of the researchers inquisitiveses of the need for a set of numerals that is universally accepted. The researcher sought for the meaning of the first letter, "Nun", "ن", of the first verse of Suratul-Kalam (Chapter of the Pen), the Sixty-Eighth Chapter of the Holy Qur'an. It was observed that there was no universally accepted, economical, explainable, linkable and consistent set of numerals used by all scientists up till the moment of making this enquiry. As a theoretical paper, explanatory method is used to review five of the most used numerals (Tally Marks, Roman Figure, Hindu-Arabic, Arabic, and Chinese) and the urgent need for a universally accepted, economical, explainable, linkable and consistent set of numerals arises. The study discovers: ·, I, \, _, L, U, =, C, O, 9, and 1.; to be used as numeral 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 respectively; as a set of universally acceptable, economical, explainable, linkable, sustainable, convertible and consistent set of numerals that originates from Islam. They can be called Islameconumerals or UAN. With UAN, everything dropped, written, drawn and/or scribbled has meaning(s) as postulated by the first verse of Qur'an 68 and everyone can easily document all figures within the shortest period. It is suggested that there should be a discipline called Numeralnomics (Study of optimum utilization of Numerals) and everybody should start using the UAN, now, in order in know their strengths and weaknesses so as to suggest a better and acceptable set of numerals for the interested readers. Similarly study can be conducted for the alphabets.

Keywords—Islameconumerals, economical, Universally Acceptable Numerals (UAN), numeralnomics.

I. INTRODUCTION

BEFORE artificial and electronic everything must have passed through nature. That is to say, we cannot do without manual documentation, no matter how electronically developed we are. The hacking of private mailing boxes and institutional websites are showing that we cannot do without natural and physical documentations. In addition, we need to find and adopt a universally acceptable means of documentation in this era of globalization.

A numeral or number can be presented as a word, letter, symbol, or figure, etc., expressing the unit of value attached to the measured variable. For the fact that Allah (SWT) confirms that men are greedy (Q17: 100) man may need to search for easy and cheaper ways of doing things without incurring the wrath of Allah (SWT). The origins of most of the numerals discussed were traced to the time immemorial. The need to have our own numbering system in the current millennium cannot be over emphasized.

Researchers have the right to embark on so many kinds of study for Allah (SWT) says, in the Holy Qur'an (Q55: 35), that if Men and *Jinns*, want to climb to the sky climb they should climb but they cannot climb except with Allah's (SWT) permission or power. In addition, the statement of Allah (SWT) that the future will be better than the previous is expressed in the Holy Qur'an (Q93: 4-5) shows that one can always get better things as time passes on. Thus, the search for and application of Universally Acceptable Numerals (UAN) to all or most of our transactions will be a welcome development in Islam and the entire Humanity, for Allah (SWT) says the revelations in the Qur'an is complete, promises us better things, and says no new Prophets will be sent to us after Prophet Muhammad (SAAWS).

Most of the previous researches dealt with scientific, technological and spiritual development that would need either oral, physical, solar, air, fire, water and/or fuel (Crude-Oil, Petrol or Black Gold) before they perform the desired operations. All of these were done without carrying along much more natural development that will require external influence. In order to do this, the researcher thinks we should start with the numbering system. The researcher thinks we should have a modern, millennium, and universally accepted numbering system. Such number should be identifiable, writable, minimal, and acceptable by all. This is part of what we need to achieve the spirit of globalization.

The problem here is that the existing numerals are not acceptable by all, not linkable to other numerals, not linkable to any religion, and posit that some write-ups have no numerical meanings. The first letter and first verse of Qur'an 68 is interpreted as a something that is known by Allah (SWT) alone. The research question is: Can we get a universally acceptable set of numerals?

The major objective of the study is to discover a set of meaningful, linkable, economical, explainable, sustainable, universally acceptable and accepted numbering method. It is assumed that the conditions for having a current and millennium compliant numerals that may become numeral millennial are:

1. A unit or one symbol must represent one of the numerals in the unit, first ten numbers (0 to 9), in the proposed set of numerals.

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2. The next set of numerals after ten to the last number in the set (10 to 99) must not have more than two digits. This should continue, such that when the numbers get to hundreds they will be three in number, first-ten of thousand should not be more than four in number and so on.
3. The numbers must be explainable.
4. They must be sustainable to pass the test of time.
5. They shall be identifiable.
6. They must be economical or shorter than all of the previously used numerals.
7. They must make meaningful or valuable.
8. They must have been in existence before now and
9. They must have universal acceptability;
10. They can be computerized easily.

The study is limited to five types of numerals that are in vogue in the world (i.e. Tally Marks, Chinese, Indo-Arabic, Roman Figure, and Arabic Numerals) and the first letter, "Nun", (ن), of Qur'anic Chapter of Pen. The Qur'anic verses used in this Paper are obtained from [1]. The abbreviation like ATUAN, RAT, SAAWS, SWT, and UAN means Alternative(s) to Universally Acceptable Numerals, Right Angle Triangle, Salah Allah Alaehi Was-Salaam (This is an Arabic Statement meaning: Peace and Blessings of Allah be with him), *SubuhanahuwaTahaala* is an Arabic statement denoting Glory and Supremacy be to Him) and Universally Acceptable Numerals, respectively.

II. Review of Literature on Evolution of Numerals

This section contains the explanation of notable concepts, review of relevant stories and empirical literature on numerals.

Numeral is numbering system used in mathematics [2]. Numeral is a symbol or name that stands for a number; thus, a number is an idea, the numeral is how we write it; and a digit is a single symbol used to make a numeral [3]. Reference [4] observes that simple arithmetic is easier with Roman numerals, multiplication, division, and fractions but more advanced mathematics are difficult for the lack of a zero is a particular disadvantage. Thus, Hindo-Arabic numerals are slowly replacing Roman ones in everyday life [4].

Numeralnomics is a conglomeration of two different words "Numeral" that represents numerals and "...nomics" that ends Economics as a word. Thus, Numeralnomics can be defined as the study of the optimal ways of writing numbers, figures, symbols and everything that signifies units of counting figures.

Ancient Chinese did their mathematics on an abacus but the bead-abacus is a popular computational device, evident today in Chinese classrooms, markets and shops [5]. The Chinese were writing numbers, by about 1500 BC, in the Shang Dynasty, by arranging their short bamboo rods in ways by which the numerals in units (1 - 9) were depicted by rods laid in horizontal order, those in tens (10 - 99) in vertical ways while those in hundreds were arranged in horizontal order again; had no zero but they do leave spaces or two horizontal or vertical lines, next to each other to indicate that numbers were missing; and this kind of Chinese use of numerals was dated back to about 1400 BC or earlier, although the numbers might have changed [6].

According to [7], Chinese can be written from left to right, from right to left, from top to bottom, or from bottom to top, which must lead to some ambiguity for numbers! Left to right is common. He continues by saying that the Chinese system is really a way of writing numbers as words, is not now used for calculation and the Chinese use Arabic numbers for that purpose.

It is reported that some folk etymologies postulates that the original forms of these symbols indicate their value based on the number of angles they contain but [8] argues that there is no evidence exists to such argument.

Al-Khawarizmi, in 825 AD wrote a treatise on the calculation of numbers with Hindu Numerals (9). This is the 12th Century Latin translation called Algoritmi de numeroindorum but learnt as Logrithims in the modern-day econometrics. Learning from Algebra invented by Muhammad Ibn Musa Al-Khawarizm, who invented Algebra, one may equally think of moving from Alphabets to Numerals. Thus, the Arabic letter "ن", called "Nun" that starts the Qur'anic Chapter on The Pen (Qur'an 68) can be used. Hindu–Arabic numeral system is a positional decimal numeral system developed between the first and fifth centuries by the Indian mathematicians and it is widely used in modern life.

After synthesizing the Literature is discovered that the origins of the numerals discussed are traced to the time immemorial. Chinese Numeral has no zero while Indian Mathematicians invented zero. Numeral one is similar in all numerals. Latin numeral is not too different from Tally Marks and Roman Numerals. The numerals used by the Europeans originated from Hindus-Arabic Numerals and are called Arabic Numerals. The means that current numerals are either discovered from words, stones, rods and abacus which have pardonable weaknesses. Thus, there is an urgent need to modernize the existing numerals in order to develop a set of globally acceptable numerals for the current millennium.

III. Methodology

The literature reviewed showed the existing numerals used pictures and symbols of living things to represent numbers or values, as presented by the Chinese and Indians/Arabian numeralists. The study analyzes the existing numerals with respect to the nations and objects of origin using them as basis to find basic values for people, objects, time and other valuable things. The study also looks into the explain-ability, linkability and economic nature of these numerals with each other.

One of the Qur'anic Chapters that begins with only one letter is *Suratul-Kalam* (Qur'an 68: 1). It begins with letter "N" (ن) and is called "Nun" in Arabic. Every commentator of the Holy Qur'an used to say only Allah knows its meaning(s). They do not say we shall not search for its meaning(s) and usage(s). With these reasons, it is not the objective of this study to find all of the meanings of the 'dot' talk-less of the 'nun' but how to optimally, utilize the ones thought of. Also, in both English and Arabic Alphabets, letter "N" (ن)always

follow letter "M". Thus, the movement of the dot on letter "N" (ن) play very significant roles in all documentations. Therefore, every moving thing can write, at least, a numeral. The more the movement of the dots, the greater the number of numerals written and vice versa.

Following the above, the study uses the dot that starts the 68th Chapter of the Holy Qur'an and developed it to letter Nun, (ن) and/or a Right-Angle Triangle (RAT) to develop UAN. In addition, based on the Qur'anic verse "*Was-Safuhi Wal-Witri*" (Q 89: 3): I/- which if joined together makes a Right-Angle Triangle. This could be interpreted as "... and two and three" which can be interpreted as "after One (1), we can add Two (2) and One to make Three (3)".

IV. PRESENTATION AND ANALYSIS OF NUMERALS, FINDINGS, DISCUSSIONS, AND POLICY IMPLICATIONS

A display of the existing and regularly used numerals all over the world is made below in order to make comparative analysis that goes thus:

TABLE I
PRESENTATION OF THE FIVE MOST USED NUMERALS IN THE WORLD

Words	Arabic	Chinese	Roman	Tally mark	Hindu-Arabic
Zero	0				.
One	1	I	I	I	١
Two	2	II	II	II	٢
Three	3	III	III	III	٣
Four	4	IIII	IV	IIII	٤
Five	5	IIIII	V	IIII	٥
Six	6		VI	IIII I	٦
Seven	7		VII	IIII II	٧
Eight	8		VIII	IIII III	٨
Nine	9		IX	IIII IIII	٩
Ten	10		X	IIII IIII	١٠

Based on Table I, only Chinese and Roman numerals in addition to Tally Marks are explainable from one the first to the fifth numerals while rest are neither explainable and nor linkable to the previous ones and they are not economical for they occupy too much spaces when writing them. Only numeral one (1) under Hindu-Arabic and Arabic Numerals is explainable and linkable to numeral one of the other counting systems. All other numerals under Hindu-Arabic and Arabic Numerals are not linkable to each other but they are economical (occupy lesser spaces than the numerals of other counting systems.

Concerning the Tally Marks, straight lines are drawn to indicate numerals. The more the separate lines you draw, before you reach five, the more the numerals you have written. After the fourth numerals, you draw a line to link the first with fourth numerals to make the fifth numeral. Thus, the first five numerals are explainable and linkable but they occupy too much space. Thus, it is not economically advisable to be using Tally Marks as numerals as much as possible.

Roman numerals look like it is obtained from the Tally Marks. It is an improvement over Tally Marks by removing the first three line in Tally Marks five and use the diagonal

line and the last line to make up letter "V" which is called five. Margin of two Letters, "V" up and down brings Letter "X" which represents the tenth Roman numeral.

Following the statement of Allah (SWT) that says whosoever does good deeds will see it and vice versa (Q 99: 1-8) researchers are bound to know that whatever is done have meaning(s) and will be seen when the earth is shaken. Thus, every step, touch, look, dot and move we make have meaning(s). Thus, as all human beings will see their contributions to human development, on the Day of Judgment, the study intends to introduce costs (time, ink, space, labor, and money) minimization when documenting the numerical values of variables.

It is the dots made, by fingers, on computers that are processed to display meaningful information. Without the dots made on computers there will be nothing to processed talk-less of having outputs that are meaningful. Surprisingly, no conventional writer has indicated that writing of numerals could begin with dots except as indicated in the Qur'an (Q 68: 1) and can be in even and odd numbers as in Qur'an (Q 89: 3). The even and odd numbers in Qur'an (Q 89: 3) brings the issue of Right-Angle Triangle to the limelight. Thus, the marriage and/or amalgamation of two odd numbers will always yield a new numeral.

The study could have named this set of numerals as called Islameconumerals because it originated from the religion of Islam but decides to use Universally Acceptable Numerals(UAN) as the name because they were not called Islameconumerals by Allah (SWT) to the Holy Prophet, Muhammad (SAAWS); the Qur'anic chapter that serves as the motivational factor to this study ends with a message to the Universe; and the same Letter, Nun (ن) that starts also ends the Chapter.

The method of using two zeros ('00) to represent hundred and three zero ('000) to stand for thousand are consistent with a Qur'anic verse "… and two and Threes" (Q 89: 3). Thus, three zeros in three places which make billions are also consistent with the above verse. In addition, the numeral one billion contains ten digits as a numeral. Therefore, writing of a numeral system up to a billion is necessary and sufficient as an introductory numeral for all numbering system that will be introduced.

The Arabic letter "ن", "N" called "Nun" is a combination of a dot (.) and a symbol or curve that contains three things. The letters contained in Nun are: a straight line like capital letter "l", a curve in the form of a diagonal line, "/" that slopes from the right to the left, and a flat line, "_" that looks like an underscore. The vertical line "I" are obtained twice (at the beginning and at the end of letter "Nun"). The same thing applies to the diagonal line "\" which can also be written as "\" also appears twice writing "Nun"). Then the flat letter "_~ appears only once when writing "Nun". Based on the analogy above, one can write Islameconumerals from four sides (Rightward, Leftward, upward and downward) and still have the same meaning.

The dot (.) that serves as numeral zero should always be placed at the middle of the spaces provided for writing

numerals. Every writing begins with dots. Most likely, after dotting a space, the next thing is the drawing of a straight line. Thus, if a dot is zero, the next line that follows the dot can be counted one. After the straight line, most likely the next line would be either a curve or diagonal line which can be named the second number or two-capital of Letter "t" (i.e. "T") will now replace "=" as equality sign or symbol and Small "I" (i.e. "i") will serve as a fractional notation but all other mathematical symbols retain their names, values, and usages.

There was a wish to name this set of numerals as Islameconumerals but due to the fact that Chapter 68 of the Holy Qur'an begins with Nun whose meaning is known by Allah (SWT) alone and ends with Nun of the last word, which means universe, in the Chapter, the author decides to name them as Universally Acceptable Numerals. Islameconumerals is a new word invented by the author. It is a marriage of three words, namely: Islamic, Economics and Numerals where "Islamic" represents Islam as a Religion, "eco" stands for Economics as a field of Study and "numerals" denotes a counting system.

A. Findings

The study finds that the usage of the dot (.) in Qur'an 68 verse one (Q 68: 1), its remaining part to make Nun "ن" and its movement as a diagram to be a Right-Angle Triangle we can be lead to the formation of UAN system of documenting numerals. Numerals under UAN are writable, economical, explainable, linkable, consistent and universally acceptable numerals.For quick understanding and remembrance of UAN the usage of diagrammatic presentation comes into play. Thus, a triangle is drawn below to show the first three numerals under UAN.
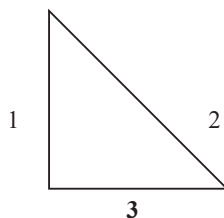

Fig. 1 A Right-Angle Triangle displaying the First-Three UAN Numerals

From the above triangular diagram, the line of vertical axis represents the first numeral (l), the diagonal line denotes the second numeral (\) while the last line or horizontal line displays the third numeral (-).By adding one to three you get numeral four (L), aggregation of two to three gives numeral five (U) and summation of all sides of the right-angle triangle gives numeral six (right angle triangle or =)Prior to the above was the Arabic Alphabet *Nun* which is drawn below:

Fig. 2 Specimen of Arabic Letter *NUN* displaying the First-Three UAN Numeral (Source: Arabic Letter that Starts Qur'an 68 [1])

The dot on the Arabic letter, *Nun,* represents zero. This indicates that every writing begins and ends with dots (i.e. ".") and these represent numeral zero on means nothing. It is the differences made by the movements between these dots that indicate numerical values.

Thus, two vertical dots joined together as a Line (i.e. ":" joined together as "I") denotes numeral one. The joining of these dots to make a shape is what depicts a numeral.

Each and every Diagonal line made of two dots (i.e. "\") stands for numeral two.

The Horizontal Lines (i.e. "-") connotes numeral three.

The addition of numeral one (i.e. "I") to numeral three (i.e. "-") gives the fourth numeral (i.e. "L"). Thus, numeral four is a capital "L".

The addition of numeral one (i.e. "I") to numeral four (i.e. "L") gives the fifth numeral (i.e. "U"). Capital letter "U" is used because it may not be easy for everybody to write it without being curved.

The addition of a numeral three (i.e. "-") to another numeral three (i.e. "-") gives the Sixth numeral (i.e. "="). Thus, numeral six is the current symbol we use for equality in all quantitative studies

The addition of numeral one (i.e. "I") to numeral six (i.e. "=") gives the Seventh numeral (i.e. "C"). Capital letter "C" is used because it may not be easy for everybody to write it without being curved.

The addition of numeral one (i.e. "I") to numeral seven (i.e. "C") gives the Eighth numeral (i.e. "O"). Letter "O" is used instead of a squared figure because it may not be easy for everybody to write it without being curved.

The addition of numeral one (i.e. "I") to numeral eight (i.e. "O") gives the Ninth numeral (i.e. "9"). The numeral nine is not having straight lines because it may not be possible for most people to write or draw it with straight lines without being curved.

The placement of numeral one (i.e. "I") before numeral zero (i.e. ".") means the Tenth numeral (i.e. "I.").

Numerals: eleven, twenty, one hundred, one thousand and one million can be written as "II", "\.", "I..", "I…", and "I……" respectively.

All mathematical symbols of addition (+), subtraction (-), multiplication (X), division (÷), square-roots (√) and sigma notation (Σ); among others except the dot (.), slash (\) and equality (=) symbols that are included in UAN can retain their mathematical importance as symbols and Economical for minimizing spaces.

In order that Islameconumerals or UAN will not affect and/confuse the existing numerals and signs, too much, the study suggests provisional signs or symbols to represent the existing numerals that have new roles in the newly discovered numerals, Islameconumerals. For instance, the dot "." that means zero under Islameconumerals can lead to the employment of another dot at different position to represent decimal point. Also, Capital form of letter "t' i.e. "T" can be used to represent equality sign which is the sixth numeral under UAN while small letter "t" can be used as the diagonal line (/) in-between the numerator and denominator when

writing the relationship between one numeral or variable and the other. All other mathematical symbols can retain their functions.

The Qur'anic verse "*Was-Safuhi wal-Witri*" (Q 89: 3) has always been interpreted as "and the even and the odds". This study thinks the interpreters have not made enough uses and interpretations of this verse. This is because the numeral eight (8) in the number of that chapter is the same as two raised to power three (i.e. $8=2^3$). Similarly, numeral nine (9) that follows it is not different from three raised to power two (i.e. $9=3^2$). Thus, the numerical accuracy is beyond human knowledge that can be documented as in the Qur'an (Q18: 110).

B. Discussion of Findings

By comparing Islameconumerals or UAN with Arabic Numerals one can see that only Numeral One under Arabic Numeral is explainable but it has no linkage with others while all Numerals under Islameconumerals are explainable, linkable and economical. All one needs to know, very well, to understand UAN, are the zero (.), even (/) and the first two odd numbers (1& _) and add them together to write the next numerals and other desired numerals.

Numeral zero (0) under Islameconumerals is a dot (-), numeral one (1) is the writing or drawing or symbolizing of a vertical line or axis (I).

Numeral three (3) under Islameconumerals is the writing or drawing or symbolizing of a horizontal line or axis (_). With these, all interested readers and writers would see and know that it is easier to write and know Islameconumerals.

The first six, the eighth and the tenth numerals under Islameconumerals do cost lesser ink and time to write than the corresponding numerals under Arabic numerals but reverse is the case for numerals 7. However, writing of numeral nine is similar under the two numbering systems. This is where Nun as in Chapter 68 of the Holy Qur'an comes to play a significant role.

Also, in the first-eleven numerals, only numeral one (I) and numeral nine (9) retain the values and symbols they were having before. All other symbols are new and represent new numerical values.

Due to the fact that Tally Marks occupy large spaces, it is assumed that users have stopped using Tally Marks as the major numeral of indicating the worth of their variables. The upper dot of the first letter of the verse of Qur'an Chapter 68 is the origin of UAN. It is the most significant numeral among the UAN. These numerals are convertible, addable (can be added) readable and universally employable. They are transformable leftward and rightward, downward and upward. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

UAN is more economical than Tally Marks in all ramifications and embodiments. It is also more economical than the Hindu-Arabic Numeral except that it is similar to when 0, 1. 9, and 10 or are written as: ., 1, 9 and 1.; respectively.

UAN is also more economical than the Arabic Numerals adopted by the Europeans except that it is equal when writing numeral one (l) and nine (9) but less economical when writing numeral seven as "7" under Arabic and as "C" under UAN.

TABLE II
COMPARISON OF THE FIVE MOST USED NUMERALS WITH THE UAN

Number in words	Arabic Numeral	Chinese Numeral	Roman Numeral	Tally Marks	Hindu-Arabic
Zero	0				.
One	1	I	I	I	١
Two	2	II	II	II	٢
Three	3	III	III	III	٣
Four	4	IIII	IV	IIII	٤
Five	5	IIIII	V	IIII	٥
Six	6		VI	IIII I	٦
Seven	7		VII	IIII II	٧
Eight	8		VIII	IIII III	٨
Nine	9		IX	IIIIIIII	٩
Ten	10		X	IIIIIIII	١٠

Then, = which serves as six shall be replaced by "T" for "Total or Equal to" or "t" to serve as the fractional line "/" or "\" when writing denominator over numerator. Despite the invention of electronic means of documentation, we cannot do without manual documentation. Thus, we need to look to the most easy, crucial, concise, smallest and identifiable, describable, divisible, consistent and acceptable means of documentation.

To understand UAN, all that one needs to know is a dot, its movement and interpret its meaning when first two Odd Numbers are added to make new numerals. Therefore, the adoption of UAN will increase the number of literate people in the world.

Almost everybody, if not the whole world knows that part of the third world countries problems are: poverty, irregular supply of electricity, internet hacking. As such, they cannot do without manual documentation. Thus, the importance of finding a better way of documentation for them cannot be over emphasized. It is on this note that this study makes the following proposal as its recommendations.

Thus, everything written or scribbled, by man, under UAN is: Meaningful or Explainable, Traceable, Acceptable to the Leftists and Rightists, Retains the usability of all existing mathematical symbols, Economical minimize spaces, Linkable and Consistent. Thus, UAN is superior over other forms of numerals

C. Policy Implications

The first set of users could be the security men. Thus, the most preferable numerals to the Policy Makers may be Islameconumerals, UAN. Its usage, UAN, can be followed by any other numeral the user is familiar with. We need to minimize our reliance on Machines for calculations.

All numbers in UAN are transposable from all sides and places as shown by Table II above.

V. Proposal for the Adoption of UAN

Owing to the fact that all numerals under UAN are explainable, economical and linkable to others, the study makes the following proposal.

It is suggested that everybody shall recognize the fact that the study has discovered a set of Universally Acceptable Numerals (UAN) which are explainable, economical, linkable, in decimal form, sustainable and makes everything touched, written or drawn to have universally acceptable meaning(s) among others.

Stakeholders shall know that UAN is discovered from the natural symbol (i.e. dot "." which is a natural number that everybody writes when he touches the ground, at birth). Nobody is excluded from it and nobody can exempt himself from it.

The adoption of UAN by all stakeholders for documentation in institutions all over the world shall start in earnest in order to discover its weaknesses and make amendments. The letter *Qaf* (ق) that starts another Qur'anic Chapter (Q50: 1) shall be studied, also, to obtain Islamically and Universally Acceptable Letters (UAL) or Alphabets. The first ninety-nine numerals under UAN can be written as displayed below.

TABLE III
MATRIX OF THE FIRST NINETY-NINE NUMERALS UNDER UAN

.	I	\	-	L	U	=	C	0	9
I.	Ll	I\	I-	IL	IU	I=	IC	I0	I9
\.	/l/	\\	\-	\L	\U	\=	\C	\0	\9
-.	-l	-\	--	-L	-U	-=	-C	-0	-9
L.	Ll	L\	L-	LL	LU	L=	LC	L8	L9
U.	Ul	U\	U-	UL	UU	U=	UC	U0	U9
=.	=l	=\	=-	=L	=U	==	=C	=0	=9
C.	Cl	C\	C-	CL	CU	C=	CC	C0	C9
0.	0l	0\	0-	0L	0U	0=	0C	00	09
9.	9l	9\	9-	9L	9U	9=	9C	90	99

Thus, Table III can be read from zero to ninety-nine (i.e. zero, one, two, three, …ninety-seven, ninety-eight, and ninety-nine). The numerals in the table III above are the Universally Acceptable Numerals (UAN). They, UAN numerals, are readable, explainable, linkable and economical to be recommended for universal usage.

REFERENCES

[1] M. T. Al-Hilali, & M. M. Khan, Interpretation of the Meanings of The Noble Qur'an in The English Language: A summarized Version of At-Tabari, Al-Qurtubi and IbnKathir with Comments from Sahih Al-Bukhari. Darussalam Publishers and Distributor, Riyadh, Kingdom of Saudi Arabia, 2011.

[2] Eurodyne, "Hindu-Arabic Numerals" https://en.m.wikipedia.org/wiki/Numerals. 11092016, 2015.

[3] Mathsisfun, Numbers Index. www.mathsisfun.com/numbers/numbers-numerals-digits.html Retrieved on 11092016 9:20am. 2016.

[4] P. Lewis, "Indo-Arabic Numerals" http://www.web40571.clarahost.co.uk/roman/use.htm. Downloaded on 11092016, 2005.

[5] F. J. Swetz. *Numerals from Ancient China*. 1989

[6] K. E. Carr. "Math in Ancient China" 2016 https://sites.google.com/a/heritagecollegiate.org/hclassmith//classroom-news/impor.... 04072017 10:30am

[7] J. O. Edkins. "Chinese Numerals" http://gwydir.demon.co.uk/jo/numbers/china/standard.htm. Downloaded on 11092016. 8:30pm, 2006.

[8] J. J. O'Connor, and E. F. Robertson. Indian Numerals, MacTutor History of Mathematics Archive, School of Mathematics and Statistics, University of St. Andrews, Scotland. 2000.

[9] Al-Khawarizmi, Ibn Musa. Al-Kitab al-mukhtasar fi hisab al-jabr wa'l-muqabala. 825. http://www.britannica.com/topic/The-Compedious-Book-on-Calculation-by-Completion-and-Balancing. 25082017, 11:09am/