

Universal Multiple-Octet Coded Character Set
 International Organization for Standardization
 Organisation Internationale de Normalisation
 Международная организация по стандартизации

Doc Type: Working Group Document**Title: Proposal to encode Egyptian Hieroglyphs in the SMP of the UCS****Source: UC Berkeley Script Encoding Initiative (Universal Scripts Project)****Authors: Michael Everson and Bob Richmond****Status: Liaison Contribution****Action: For consideration by JTC1/SC2/WG2 and UTC****Replaces: N1636, N1944, L2/05-311, N3181, N3183****Date: 2007-04-10**

1. Summary. Efforts to encode Hieroglyphs in Unicode go back a long time; see Everson 1997, Everson 1999, Cook *et al* 2005, Everson and Richmond 2006. Most recently the authors have collaborated to create a source database called *UniKemet* containing 1,063 characters from Gardiner's sign-lists and related sources, together with a font based on Bob Richmond's *InScribe* font which we have used to create the proposed code table given in this document, using the code table formatting tool Unibook (<http://www.unicode.org/unibook>). In the process we identified a number of issues that needed to be resolved before a complete proposal could be submitted to the Unicode Technical Committee and ISO/IEC JTC1/SC2/WG2. Those issues were discussed at a symposium on the use of IT in Egyptology which took place early August 2006, where the content of the character set was agreed as proposed here.

2. Introduction. Hieroglyphic writing seems to have appeared in Egypt at the end of the fourth millennium BCE. The writing system is pictographic: the glyphs represent tangible objects, most of which modern scholars have been able to identify; a great many of them are easily recognizable even to non-specialists. Egyptian Hieroglyphs represent people and animals, parts of the bodies of people and animals, clothing, tools, vessels, and so on. Hieroglyphs were used to write Egyptian for more than 3,000 years retaining characteristic features such as use of colour and detail in the more elaborated expositions. Throughout the Old Kingdom, the Middle Kingdom, and the New Kingdom, between 700 and 1,000 Hieroglyphs were in regular use. During the Greco-Roman period, the number of variants, as distinguished by some modern scholars, grew to somewhere between 6,000 and 8,000. Hieroglyphs were carved in stone, painted on frescos, and could also be written with a reed stylus, though this cursive writing soon became standardized in what is called *hieratic* writing. Hieratic as a cursive form of Hieroglyphs shares the proposed encoding. The Demotic script and then the Coptic script replaced the earlier Hieroglyphic/Hieratic script for much practical writing of Egyptian but Hieroglyphs and Hieratic continued in use until the fourth century CE. On the Gateway of Hadrian in the Temple complex at Philae an inscription dated 0394-08-24 has been found, and this is thought to be among the latest examples of Ancient Egyptian writing in Hieroglyphs.

3. Structure. Egyptian Hieroglyphs made use of 24 letters comprising a true alphabet, of which the modern alphabetic order is *z, i, y, c, w, b, p, f, m, n, r, h, h, h, h, s/z, š, k, k, g, t, t, d, d* in Alan Gardiner's transcription. Other transcription systems exist; *i* for instance is sometimes written *j*. In addition to the basic alphabet, the script made use of a fairly large number of "biliterals" and "trilaterals" which represented sequences of two or three consonants, examples of these are biliterals *c3, w3, b3, p3, m3, h3, h3, h3, s3, š3, k3, t3, t3, d3, mī, tī, w^c, h^c, 3w, iw, mw, nw, rw, hw, hw, sw, šw, dw, 3b, nb, wp, kp, im, nm, hm, km,*
















gm, tm, in, wn, mn, nn, hn, hn, sn, šn, ir, wr, pr, mr, hr, hr, dr, bh, ph, mh, nh, is, ms, ns, hs, šs, gs, ck, sk, mt, ht, st, šd, kd, dd, cd, wd, nd, hd, and trilaterals *chc, hpr, sdm, nfr, chh, htp*; there are many more. In addition to the phonetic characters, Egyptian Hieroglyphs made use of a very large number of logographic characters (called “logograms” or “ideograms” by Egyptologists), some of which could be read as a word, and some of which had only a semantic “determinative” function, to enable the reader to distinguish between words which were otherwise written the same, thus: *hb* ‘enter’, *hb* ‘ibis’, and *hb* ‘plough’. Sometimes a number of characters were used redundantly. For example, *gbz* ‘arm’ was conventionally written , literally *g-b-bz-z*. Within a word, characters are arranged together to form an aesthetically-pleasing arrangement within a notional square; see “Rendering” below.







4. Directionality. Characters may be written left-to-right or right-to-left, generally in horizontal lines but often (especially in monumental texts) in vertical columns. In general, directionality is easy to determine because one reads a line into the faces of the people and animals, so *rmt* ‘people’ becomes when written right-to-left. Like Old Italic, Egyptian Hieroglyphs are given strong left-to-right directionality in this proposed encoding because most Egyptian editions are published in English, French, and German and left-to-right directionality is the standard presentation mode. U+202E RIGHT-TO-LEFT OVERRIDE can be used for the presentation of right-to-left Egyptian text. In this case, as with Old Italic, the glyphs from Egyptian Hieroglyphic fonts should be mirrored from those given in the code charts.





5. Rendering. The proposed encoding of Egyptian Hieroglyphs treats them simply as a set of text elements; a higher-level protocol would be required for the necessary clustering, mirroring, and rotation of signs within text. This approach works well in the context of existing encoding conventions which use a simple markup scheme to indicate such formatting. The most prominent example of this which has been developed since computers were introduced into Egyptology in the late 1970s and the early 1980s, called the *Manuel de codage* (*MdC*; Paris: 1988), a later recension of which can be seen in van den Berg 1997. These conventions make use of ASCII characters to separate hieroglyphic characters and to indicate the organization of the hieroglyphic characters in space (that is, the position of hieroglyphic characters in a block). The hyphen “-” is used to separate hieroglyphic blocks; the colon “:” superposes one hieroglyphic character over another; the asterisk “*” is used to juxtapose two or more hieroglyphic characters, typically when they are a group which is superposed over or under another hieroglyphic character or group of hieroglyphic characters. So “ - : ” will render (one way of writing the name of Osiris), and “ : * ” will render (another way of writing the same name). More complex overlapping combinations can use the ampersand “&”, so “ & ” will render . Other *MdC* notations are used to indicate the reversal or rotation of hieroglyphic characters within the LTR text stream. The application of *MdC* conventions to text is not, however, a plain-text process. Ordinary word-processors are not expected to be able to use *MdC* conventions to render Egyptian Hieroglyphs correctly. In plain text the examples given will render - : , : * , and & , and without *MdC* markup they will render as , , and . Neither is the illustration of *MdC* given here intended to be prescriptive. Other schemes have been proposed that attempt to provide greater flexibility than *MdC* by use of more elaborate encodings and XML and similar remarks apply. However, none has yet obtained widespread usage comparable with *MdC*. The Macintosh and Windows implementations (*MacScribe*, and *WinGlyph* and *InScribe*) make use of the *Manuel de Codage* conventions, as does the Wikimedia’s WikiHiero PHP script.




In the years since Champollion published his decipherment of Egyptian in 1824, Egyptologists have shown little interest in typesetting Hieratic, and there is no tradition of Hieratic fonts in lead or digital formats. As a cursive form of the underlying hieroglyphic characters, Hieratic is normally rendered in the more easily legible Hieroglyphs. In principle a Hieratic font based on this encoding could be devised for specialist applications. It would have very large ligature tables indeed.

6. Character names. Egyptian hieroglyphic characters are traditionally designated in a number of ways:

- by complex description:  GOD WITH HEAD OF IBIS,  DESERT HARE,  VULTURE-GODDESS NEKHBT AND COBRA-GODDESS EDJO ON BASKETS,  OWL,  LAPWING WITH WINGS TWISTED ROUND ONE ANOTHER,  QUAIL CHICK (these are Gardiner's own descriptions)
- by standardized sign number:  C3,  E34,  G16,  G17,  G24,  G43
- by conventional sound which works for only a minority of characters:  *wn*,  *m*,  *w*





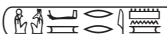



















The most convenient way of naming the characters is to identify them with their standard Egyptological catalogue numbers, since otherwise the character names would be picturesque but rather long. The name EGYPTIAN HIEROGLYPH E034 refers uniquely and unambiguously to the DESERT HARE character used for the sound *wn*. Character names are padded with zeros here for two reasons. First, they will tend to sort correctly even when “smart” sorting algorithms are not available. Second, the use of zeros offers a mechanism for distinguishing UCS character names from the many extant naming schemes for Egyptian, since formally-standardized UCS characters will have a different status than font collections like Hieroglyphica (Grimal *et al.* 1993 and 2000) or other works. Gardiner uses A44 for  KING OF UPPER EGYPT WITH FLAGELLUM; Collier and Manley (whose numbering is completely idiosyncratic) use A44 for  ARM HOLDING THE *NHBT*-WAND; Möller uses A44 for  SOLDIER WITH BOW AND QUIVER. The UCS names for  A044,  D045, and  A012 uniquely identify the characters and also identifies the designation *as* a UCS name.















According to Gardiner's identification scheme, Egyptian Hieroglyphs are classified according to letters of the alphabet, so A000 is “Man and his occupations”, B000 is “Woman and her occupations”, C000 is “Anthropomorphic deities”, D000 is “Parts of the human body”, E000 is “Mammals”, F000 is “Parts of mammals”, G000 is “Birds”, H000 is “Parts of birds”, I000 is “Amphibious animals, reptiles, etc.”, K000 is “Fishes and parts of fishes”, L000 is Invertebrata and lesser animals”, M000 is “Trees and plants”, N000 is “Sky, earth, water”, O000 is “Buildings, parts of buildings, etc.”, P000 is “Ships and parts of ships”, Q000 is “Domestic and funerary furniture”, R000 is “Temple furniture and sacred emblems”, S000 is “Crowns, dress, staves, etc.”, T000 is “Warfare, hunting, butchery”, U000 is “Agriculture, crafts, and professions”, V000 is “Rope, fibre, baskets, bags, etc.”, W000 is “Vessels of stone and earthenware”, X000 is “Loaves and cakes”, Y000 is “Writings, games, music”, Z000 is “Strokes, signs derived from Hieratic, geometrical features”, and AA000 is used for “Unclassified” signs. (Note: some individual characters have been may have been identified as belonging to other classes since the category was assigned but we have not re-assigned them.) In Gardiner 1929, 1931, and 1953 a section Ff “Signs for transcription from Hieratic” appears, but as these are identified as variants of other characters, they are named accordingly here (for example, since  G1928:95:Ff2 is a “substitute for  V7”, it is named V007A). In Gardiner 1953, a section Nn is given to represent the nomes of Egypt, with L prefixed to the number for the nomes of Lower Egypt, and U for the nomes of Upper Egypt. All of those characters are related to  N024, which indicates land marked out with irrigation runnels, which is presumably why Gardiner used the notation “Nn” for the nomes. Gardiner gives NnL1 for ; the naming convention here calls it NL001 rather than NNL001. An aesthetic complaint might be made about O000, but Gardiner used the letter O in his classification and we maintain that the leading zero is a useful convention for the reasons given above.























Gardiner identified some variants of characters by unique catalogue numbers, and others by extending adding one or two asterisks (and in one instance *a* and *a'*). UCS naming convention does not allow the use of asterisks, but it is traditional to add letters of the alphabet, as has been done here. Thus Gardiner's  G7,  G7*, and  G7** are G007, G007A, and G007B here respectively. Letters for variants are to be added serially as the Egyptian repertoire in the UCS is expanded.

7. Character set repertoire. The first set of hieroglyphic characters which should be encoded, and which is proposed here, is “the Gardiner set”, which is something of a moving target. “The Gardiner set” was not exhaustively described and enumerated by Gardiner or indeed by anyone else. The chief source of the

repertoire is Gardiner’s Middle Egyptian sign-list as given in his *Egyptian Grammar* (Gardiner 1957). This is supplemented by additional characters found in his font catalogues (Gardiner 1928, Gardiner 1929, Gardiner 1931, and Gardiner 1953), and a collection of signs found in the Griffith Institute’s *Topographical Bibliography*, which also used the Gardiner fonts. In consultation with Egyptologists, a handful of other characters has been added to this set forming the proposal here. The following criteria have been used as guidelines to determine the contents of repertoire.

7.1. Entities to which Gardiner gave specific catalogue numbers. Most of these are taken quite straightforwardly from the sign-lists. A few characters which need additional comment are discussed here. Gardiner gave catalogue numbers to  C002B,  C002C,  C013, and  C015. C002B was used in the royal name  *Sth nht mrr Imn R^c* ‘Setnakht beloved of Amun Ra’, attested in the *Topographical Bibliography* (Vol. I, Pt. II, p. 527). It can be argued that reversed characters like these should not be encoded because *Manual de Codage* markup is normally used for reversing and rotating characters. This is not always the case of course.  D054 ‘movement’ contrasts with  D055 ‘backwards’;  P001 ‘boat’ contrasts with  P001A as used in  *pn^c* ‘upset, overturn’. Some other characters are distinguished as “low” glyphs needed in Gardiner’s font: compare  E034 and  E034A,  F013 and  F013A,  G036 and  G036A,  G037 and  G037A,  N025 and  N025A,  V030 and  V030A, and  W003 and  W003A. Egyptologists are not unanimous as to the need to use these variants as characters per se, but a number of them requested the retention in the character set for completeness of representation of Gardiner’s own materials. In a certain sense they may be considered “compatibility” characters.

7.2. Positional variants without Gardiner catalogue numbers. A number of positional variants without catalogue numbers were listed in Gardiner 1957 and Gardiner 1928. An example is the down-facing fly  L003, which is arguably an error occurring only in the Index to Gardiner’s sign-list (Gardiner 1957:545);  L003 seems to be the only form found elsewhere. Other examples are the two moons  and  which are said by Gardiner to be used as determinatives; but  N011 and  N012 can represent these well enough. Twenty-six such variants were listed in a code table described as “Gardiner Positional Variants” in N3183 (Everson & Richmond 2006-10-29). The Egyptologists we consulted considered it unnecessary that these be encoded, apart from three of them. Vertical  O029A (a variant of  O029) and  Y001A (a variant of  Y001) were requested by more than one specialist because of their very high frequency of occurrence. The vertical  F045A  used in hieratic for *m, n* was identified by Gardiner as a vertical form of  *rth* ‘restrain’ but it has been shown to derive from F045  BICORNUATE UTERUS OF HEIFER, and so the two should not be unified.

7.3. Enclosures. The two principal names of the king, the nomen and praenomen, were normally written inside a cartouche: a figure representing a coil of rope, for instance  *ꜥꜣpp* ‘Apophis’. Gardiner 1957:71–76 describes the royal titulary, giving beginning and end shapes  and  signs in the Catalogue. The bracket-like convention of writing  is used in the hieratic (cf. Möller 1936:51) and some modern publications. Plain text and general purpose software should likewise treat these signs as characters and not render the fully enclosed form. Several other characters are also used to represent enclosures. While the cartouche proper normally begins with  V011A and ends with  V011B, it sometimes ends with  V011C, the “knotless” cartouche. The *hwt* enclosure used to describe houses, temples, and tombs is based on  O006, the rectangular enclosure seen in plan, from above. It may have different beginning and final forms. When  O006A begins a *hwt* enclosure,  O006D or  O006E may complete it; when  O006B or  O006C begins a *hwt* enclosure,  O006F may complete it. The *srh* or *serekh* enclosure is based on  O033, a banner. A *serekh* enclosure is begun with  O006A, and completed with  O033A. Champollion 1997:159 describes a “fortified surrounding wall” cartouche based on  O033, the fortified wall, which is used to describe countries and foreign cities; this begins with  O033A and ends with  O033B. A rectilinear form of this is also given in Champollion 2000:274; this begins with  O033C and ends with  O033D.

133AA;EGYPTIAN	HIEROGLYPH	V038;Lo;0;L; ; ; ; ;N; ; ; ;	133E9;EGYPTIAN	HIEROGLYPH	Z006;Lo;0;L; ; ; ; ;N; ; ; ;
133AB;EGYPTIAN	HIEROGLYPH	V039;Lo;0;L; ; ; ; ;N; ; ; ;	133EA;EGYPTIAN	HIEROGLYPH	Z007;Lo;0;L; ; ; ; ;N; ; ; ;
133AC;EGYPTIAN	HIEROGLYPH	V040;Nl;0;L; ; ; ; ;10;N; ; ; ;	133EB;EGYPTIAN	HIEROGLYPH	Z008;Lo;0;L; ; ; ; ;N; ; ; ;
133AD;EGYPTIAN	HIEROGLYPH	V040A;Nl;0;L; ; ; ; ;20;N; ; ; ;	133EC;EGYPTIAN	HIEROGLYPH	Z009;Lo;0;L; ; ; ; ;N; ; ; ;
133AE;EGYPTIAN	HIEROGLYPH	W001;Lo;0;L; ; ; ; ;N; ; ; ;	133ED;EGYPTIAN	HIEROGLYPH	Z010;Lo;0;L; ; ; ; ;N; ; ; ;
133AF;EGYPTIAN	HIEROGLYPH	W002;Lo;0;L; ; ; ; ;N; ; ; ;	133EE;EGYPTIAN	HIEROGLYPH	Z011;Lo;0;L; ; ; ; ;N; ; ; ;
133B0;EGYPTIAN	HIEROGLYPH	W003;Lo;0;L; ; ; ; ;N; ; ; ;	133EF;EGYPTIAN	HIEROGLYPH	Z012;Lo;0;L; ; ; ; ;N; ; ; ;
133B1;EGYPTIAN	HIEROGLYPH	W003A;Lo;0;L; ; ; ; ;N; ; ; ;	133F0;EGYPTIAN	HIEROGLYPH	Z013;Lo;0;L; ; ; ; ;N; ; ; ;
133B2;EGYPTIAN	HIEROGLYPH	W004;Lo;0;L; ; ; ; ;N; ; ; ;	133F1;EGYPTIAN	HIEROGLYPH	Z014;Lo;0;L; ; ; ; ;N; ; ; ;
133B3;EGYPTIAN	HIEROGLYPH	W005;Lo;0;L; ; ; ; ;N; ; ; ;	133F2;EGYPTIAN	HIEROGLYPH	Z015;Nl;0;L; ; ; ; ;1;N; ; ; ;
133B4;EGYPTIAN	HIEROGLYPH	W006;Lo;0;L; ; ; ; ;N; ; ; ;	133F3;EGYPTIAN	HIEROGLYPH	Z015A;Nl;0;L; ; ; ; ;2;N; ; ; ;
133B5;EGYPTIAN	HIEROGLYPH	W007;Lo;0;L; ; ; ; ;N; ; ; ;	133F4;EGYPTIAN	HIEROGLYPH	Z015B;Nl;0;L; ; ; ; ;3;N; ; ; ;
133B6;EGYPTIAN	HIEROGLYPH	W008;Lo;0;L; ; ; ; ;N; ; ; ;	133F5;EGYPTIAN	HIEROGLYPH	Z015C;Nl;0;L; ; ; ; ;4;N; ; ; ;
133B7;EGYPTIAN	HIEROGLYPH	W009;Lo;0;L; ; ; ; ;N; ; ; ;	133F6;EGYPTIAN	HIEROGLYPH	Z015D;Nl;0;L; ; ; ; ;5;N; ; ; ;
133B8;EGYPTIAN	HIEROGLYPH	W009A;Lo;0;L; ; ; ; ;N; ; ; ;	133F7;EGYPTIAN	HIEROGLYPH	Z015E;Nl;0;L; ; ; ; ;6;N; ; ; ;
133B9;EGYPTIAN	HIEROGLYPH	W010;Lo;0;L; ; ; ; ;N; ; ; ;	133F8;EGYPTIAN	HIEROGLYPH	Z015F;Nl;0;L; ; ; ; ;7;N; ; ; ;
133BA;EGYPTIAN	HIEROGLYPH	W010A;Lo;0;L; ; ; ; ;N; ; ; ;	133F9;EGYPTIAN	HIEROGLYPH	Z015G;Nl;0;L; ; ; ; ;8;N; ; ; ;
133BB;EGYPTIAN	HIEROGLYPH	W011;Lo;0;L; ; ; ; ;N; ; ; ;	133FA;EGYPTIAN	HIEROGLYPH	Z015H;Nl;0;L; ; ; ; ;9;N; ; ; ;
133BC;EGYPTIAN	HIEROGLYPH	W012;Lo;0;L; ; ; ; ;N; ; ; ;	133FB;EGYPTIAN	HIEROGLYPH	Z015I;Nl;0;L; ; ; ; ;5;N; ; ; ;
133BD;EGYPTIAN	HIEROGLYPH	W013;Lo;0;L; ; ; ; ;N; ; ; ;	133FC;EGYPTIAN	HIEROGLYPH	Z016;Nl;0;L; ; ; ; ;1;N; ; ; ;
133BE;EGYPTIAN	HIEROGLYPH	W014;Lo;0;L; ; ; ; ;N; ; ; ;	133FD;EGYPTIAN	HIEROGLYPH	Z016A;Nl;0;L; ; ; ; ;2;N; ; ; ;
133BF;EGYPTIAN	HIEROGLYPH	W014A;Lo;0;L; ; ; ; ;N; ; ; ;	133FE;EGYPTIAN	HIEROGLYPH	Z016B;Nl;0;L; ; ; ; ;3;N; ; ; ;
133C0;EGYPTIAN	HIEROGLYPH	W015;Lo;0;L; ; ; ; ;N; ; ; ;	133FF;EGYPTIAN	HIEROGLYPH	Z016C;Nl;0;L; ; ; ; ;4;N; ; ; ;
133C1;EGYPTIAN	HIEROGLYPH	W016;Lo;0;L; ; ; ; ;N; ; ; ;	13400;EGYPTIAN	HIEROGLYPH	Z016D;Nl;0;L; ; ; ; ;5;N; ; ; ;
133C2;EGYPTIAN	HIEROGLYPH	W017;Lo;0;L; ; ; ; ;N; ; ; ;	13401;EGYPTIAN	HIEROGLYPH	Z016E;Nl;0;L; ; ; ; ;6;N; ; ; ;
133C3;EGYPTIAN	HIEROGLYPH	W017A;Lo;0;L; ; ; ; ;N; ; ; ;	13402;EGYPTIAN	HIEROGLYPH	Z016F;Nl;0;L; ; ; ; ;7;N; ; ; ;
133C4;EGYPTIAN	HIEROGLYPH	W018;Lo;0;L; ; ; ; ;N; ; ; ;	13403;EGYPTIAN	HIEROGLYPH	Z016G;Nl;0;L; ; ; ; ;8;N; ; ; ;
133C5;EGYPTIAN	HIEROGLYPH	W018A;Lo;0;L; ; ; ; ;N; ; ; ;	13404;EGYPTIAN	HIEROGLYPH	Z016H;Nl;0;L; ; ; ; ;9;N; ; ; ;
133C6;EGYPTIAN	HIEROGLYPH	W019;Lo;0;L; ; ; ; ;N; ; ; ;	13405;EGYPTIAN	HIEROGLYPH	AA001;Lo;0;L; ; ; ; ;N; ; ; ;
133C7;EGYPTIAN	HIEROGLYPH	W020;Lo;0;L; ; ; ; ;N; ; ; ;	13406;EGYPTIAN	HIEROGLYPH	AA002;Lo;0;L; ; ; ; ;N; ; ; ;
133C8;EGYPTIAN	HIEROGLYPH	W021;Lo;0;L; ; ; ; ;N; ; ; ;	13407;EGYPTIAN	HIEROGLYPH	AA003;Lo;0;L; ; ; ; ;N; ; ; ;
133C9;EGYPTIAN	HIEROGLYPH	W022;Lo;0;L; ; ; ; ;N; ; ; ;	13408;EGYPTIAN	HIEROGLYPH	AA004;Lo;0;L; ; ; ; ;N; ; ; ;
133CA;EGYPTIAN	HIEROGLYPH	W023;Lo;0;L; ; ; ; ;N; ; ; ;	13409;EGYPTIAN	HIEROGLYPH	AA005;Lo;0;L; ; ; ; ;N; ; ; ;
133CB;EGYPTIAN	HIEROGLYPH	W024;Lo;0;L; ; ; ; ;N; ; ; ;	1340A;EGYPTIAN	HIEROGLYPH	AA006;Lo;0;L; ; ; ; ;N; ; ; ;
133CC;EGYPTIAN	HIEROGLYPH	W024A;Lo;0;L; ; ; ; ;N; ; ; ;	1340B;EGYPTIAN	HIEROGLYPH	AA007;Lo;0;L; ; ; ; ;N; ; ; ;
133CD;EGYPTIAN	HIEROGLYPH	W025;Lo;0;L; ; ; ; ;N; ; ; ;	1340C;EGYPTIAN	HIEROGLYPH	AA007A;Lo;0;L; ; ; ; ;N; ; ; ;
133CE;EGYPTIAN	HIEROGLYPH	X001;Lo;0;L; ; ; ; ;N; ; ; ;	1340D;EGYPTIAN	HIEROGLYPH	AA007B;Lo;0;L; ; ; ; ;N; ; ; ;
133CF;EGYPTIAN	HIEROGLYPH	X002;Lo;0;L; ; ; ; ;N; ; ; ;	1340E;EGYPTIAN	HIEROGLYPH	AA008;Lo;0;L; ; ; ; ;N; ; ; ;
133D0;EGYPTIAN	HIEROGLYPH	X003;Lo;0;L; ; ; ; ;N; ; ; ;	1340F;EGYPTIAN	HIEROGLYPH	AA009;Lo;0;L; ; ; ; ;N; ; ; ;
133D1;EGYPTIAN	HIEROGLYPH	X004;Lo;0;L; ; ; ; ;N; ; ; ;	13410;EGYPTIAN	HIEROGLYPH	AA010;Lo;0;L; ; ; ; ;N; ; ; ;
133D2;EGYPTIAN	HIEROGLYPH	X004A;Lo;0;L; ; ; ; ;N; ; ; ;	13411;EGYPTIAN	HIEROGLYPH	AA011;Lo;0;L; ; ; ; ;N; ; ; ;
133D3;EGYPTIAN	HIEROGLYPH	X005;Lo;0;L; ; ; ; ;N; ; ; ;	13412;EGYPTIAN	HIEROGLYPH	AA012;Lo;0;L; ; ; ; ;N; ; ; ;
133D4;EGYPTIAN	HIEROGLYPH	X006;Lo;0;L; ; ; ; ;N; ; ; ;	13413;EGYPTIAN	HIEROGLYPH	AA013;Lo;0;L; ; ; ; ;N; ; ; ;
133D5;EGYPTIAN	HIEROGLYPH	X006A;Lo;0;L; ; ; ; ;N; ; ; ;	13414;EGYPTIAN	HIEROGLYPH	AA014;Lo;0;L; ; ; ; ;N; ; ; ;
133D6;EGYPTIAN	HIEROGLYPH	X007;Lo;0;L; ; ; ; ;N; ; ; ;	13415;EGYPTIAN	HIEROGLYPH	AA015;Lo;0;L; ; ; ; ;N; ; ; ;
133D7;EGYPTIAN	HIEROGLYPH	X008;Lo;0;L; ; ; ; ;N; ; ; ;	13416;EGYPTIAN	HIEROGLYPH	AA016;Lo;0;L; ; ; ; ;N; ; ; ;
133D8;EGYPTIAN	HIEROGLYPH	Y001;Lo;0;L; ; ; ; ;N; ; ; ;	13417;EGYPTIAN	HIEROGLYPH	AA017;Lo;0;L; ; ; ; ;N; ; ; ;
133D9;EGYPTIAN	HIEROGLYPH	Y001A;Lo;0;L; ; ; ; ;N; ; ; ;	13418;EGYPTIAN	HIEROGLYPH	AA018;Lo;0;L; ; ; ; ;N; ; ; ;
133DA;EGYPTIAN	HIEROGLYPH	Y002;Lo;0;L; ; ; ; ;N; ; ; ;	13419;EGYPTIAN	HIEROGLYPH	AA019;Lo;0;L; ; ; ; ;N; ; ; ;
133DB;EGYPTIAN	HIEROGLYPH	Y003;Lo;0;L; ; ; ; ;N; ; ; ;	1341A;EGYPTIAN	HIEROGLYPH	AA020;Lo;0;L; ; ; ; ;N; ; ; ;
133DC;EGYPTIAN	HIEROGLYPH	Y004;Lo;0;L; ; ; ; ;N; ; ; ;	1341B;EGYPTIAN	HIEROGLYPH	AA021;Lo;0;L; ; ; ; ;N; ; ; ;
133DD;EGYPTIAN	HIEROGLYPH	Y005;Lo;0;L; ; ; ; ;N; ; ; ;	1341C;EGYPTIAN	HIEROGLYPH	AA022;Lo;0;L; ; ; ; ;N; ; ; ;
133DE;EGYPTIAN	HIEROGLYPH	Y006;Lo;0;L; ; ; ; ;N; ; ; ;	1341D;EGYPTIAN	HIEROGLYPH	AA023;Lo;0;L; ; ; ; ;N; ; ; ;
133DF;EGYPTIAN	HIEROGLYPH	Y007;Lo;0;L; ; ; ; ;N; ; ; ;	1341E;EGYPTIAN	HIEROGLYPH	AA024;Lo;0;L; ; ; ; ;N; ; ; ;
133E0;EGYPTIAN	HIEROGLYPH	Y008;Lo;0;L; ; ; ; ;N; ; ; ;	1341F;EGYPTIAN	HIEROGLYPH	AA025;Lo;0;L; ; ; ; ;N; ; ; ;
133E1;EGYPTIAN	HIEROGLYPH	Z001;Lo;0;L; ; ; ; ;N; ; ; ;	13420;EGYPTIAN	HIEROGLYPH	AA026;Lo;0;L; ; ; ; ;N; ; ; ;
133E2;EGYPTIAN	HIEROGLYPH	Z002;Lo;0;L; ; ; ; ;N; ; ; ;	13421;EGYPTIAN	HIEROGLYPH	AA027;Lo;0;L; ; ; ; ;N; ; ; ;
133E3;EGYPTIAN	HIEROGLYPH	Z003;Lo;0;L; ; ; ; ;N; ; ; ;	13422;EGYPTIAN	HIEROGLYPH	AA028;Lo;0;L; ; ; ; ;N; ; ; ;
133E4;EGYPTIAN	HIEROGLYPH	Z003A;Lo;0;L; ; ; ; ;N; ; ; ;	13423;EGYPTIAN	HIEROGLYPH	AA029;Lo;0;L; ; ; ; ;N; ; ; ;
133E5;EGYPTIAN	HIEROGLYPH	Z004;Lo;0;L; ; ; ; ;N; ; ; ;	13424;EGYPTIAN	HIEROGLYPH	AA030;Lo;0;L; ; ; ; ;N; ; ; ;
133E6;EGYPTIAN	HIEROGLYPH	Z004A;Lo;0;L; ; ; ; ;N; ; ; ;	13425;EGYPTIAN	HIEROGLYPH	AA031;Lo;0;L; ; ; ; ;N; ; ; ;
133E7;EGYPTIAN	HIEROGLYPH	Z005;Lo;0;L; ; ; ; ;N; ; ; ;	13426;EGYPTIAN	HIEROGLYPH	AA032;Lo;0;L; ; ; ; ;N; ; ; ;
133E8;EGYPTIAN	HIEROGLYPH	Z005A;Lo;0;L; ; ; ; ;N; ; ; ;			

9. Ordering. Deterministic ordering of actual hieroglyphic characters is something that is probably unknown to the Egyptian tradition, since Egyptologists have tended to sort the transliterations. However, an alphabetic order does exist (z, i, y, c, w, b, p, f, m, n, r, h, h, h, h, s/z, š, k, k, g, t, t, d, d as given above), and this should be the basis for ordering those characters with a phonetic reading. Determinatives without phonetic readings should probably be left in code-point order. Some experimentation and investigation of current practice will have to be undertaken before precise recommendations can be made, and this will be the subject of a further proposal as input to ISO/IEC 14651 and the Unicode Collation Algorithm. As an example, however, we have taken a set of words beginning in g- from Gardiner's grammar and ordered the list of words there as it might be ordered according to the principles outlined above.

Some of the characters in the sample have a single phonetic value, some have more than one value, and some have no value but are just determinatives. Assigning a numeric value to each of the 24 letters of the alphabet (so $\text{𓀀} g = 20$), and expanding biliteral and triliteral to the same values (so $\text{𓀀𓀁} gb = 20-06$ and $\text{𓀀𓀁𓀂} grg = 20-11-20$), and leaving determinatives values 25 to 52 (for this data set) so that they sort in coding order (so $\text{𓀀𓀁𓀂} E029 = 35$ and $\text{𓀀} N002 = 39$), the following results were obtained:

	<i>iwgrt</i>		<i>gmgm</i>		<i>ghs</i>
	<i>igrt</i>		<i>gmt</i>		<i>ghs</i>
	<i>g3wt</i>		<i>gnf</i>		<i>gs</i>
	<i>g3W</i>		<i>gnf</i>		<i>gsw</i>
	<i>g3W</i>		<i>gnwt</i>		<i>gs3</i>
	<i>g3W</i>		<i>gnwt</i>		<i>gs</i>
	<i>Gbb</i>		<i>gnn</i>		<i>gs</i>
	<i>gb3</i>		<i>gnwt</i>		<i>gs</i>
	<i>gbb</i>		<i>gnwty</i>		<i>gsw</i>
	<i>Gb</i>		<i>gr</i>		<i>gs-pr</i>
	<i>gbgb</i>		<i>grh</i>		<i>gsti</i>
	<i>Gbtiw</i>		<i>grh</i>		<i>ggwy</i>
	<i>gb3</i>		<i>grg</i>		<i>ggwt</i>
	<i>gfn</i>		<i>grg</i>		<i>Gsy</i>
	<i>gf</i>		<i>grg</i>		<i>gsti</i>
	<i>gmi</i>		<i>grg</i>		<i>ggt</i>
	<i>gmw</i>		<i>grg</i>		<i>di hr gs</i>
	<i>gmht</i>		<i>grt</i>		<i>ghs</i>
	<i>gmh</i>		<i>gr</i>		<i>grh</i>

Figure 1. The words in Gardiner’s grammar beginning with g-, expanded to plain-text strings of characters and run through a very basic sorting algorithm as proof-of-concept regarding the ordering of hieroglyphic characters as opposed to ordering of their transliterations.

Compare this with the same list of words in Gardiner’s dictionary:

(W 11)	(A 2) be silent; silence; <i>grw</i> silent, calm one; <i>igrt</i> , var. <i>iwgrt</i> (p. 209, n. 7), the necropolis, lit. the silent one; <i>gr</i> silence (someone); silence, quiet (n).
var. det. <i>grw</i> (V 32; Aa 2) lack, <i>r</i> (something), be narrow, short of breath; deprive, <i>m</i> of (breath); <i>grt</i> , <i>grw</i> lack, <i>n</i> of; <i>n-grw</i> through lack of, § 178; <i>grwrs</i> det. (D 1) throttle, choke.	(A 2) older <i>gr</i> , early varr. <i>igrt</i> , <i>igr</i> , encl. part., moreover, now, §§ 66, 255; as adv., further, either, §§ 205, 1; 255.
(G 38, O.K.) white-fronted goose.	(D 41) cease, <i>m</i> from; finish, <i>m</i> (something); <i>grh</i> make to cease, quell.
older var. <i>Gbb</i> , the earth-god Geb, Gk. Κηβ.	abbrev. <i>grh</i> (N 2) night.
(V 33) Kift, Coptus, a town in Upper Egypt.	var. <i>grg</i> (U 17) 1. snare (vb.); 2. found, establish.
(D 41) arm; det. side (of room).	var. <i>grg</i> falsehood, lie.
<i>ggb</i> fall prostrate; <i>ggbht</i> headlong fall.	var. <i>ghs</i> (E 29; D 56) gazelle, f. <i>ghst</i> .
var. <i>gif</i> , <i>guf</i> (E 33), monkey.	(Aa 13-16) side; half, § 265; <i>r-gs</i> , rarely <i>hr-gs</i> , beside, in the presence of, § 178;
(D 19), var. <i>gnf</i> , rebuff (vb.); <i>gfnw</i> rebuff (n).	<i>gs(wy)</i> fy its two sides, § 75, 2; <i>di hr gs</i> 1. dispose of, kill; 2. show partiality; <i>grw</i> neighbours; <i>grw</i> (X 7, O.K.) half-loaves; <i>gs-pr</i> administration (?), in title <i>imy-r gs-pr</i> .
(G 28, O.K.) black ibis.	var. (Aa 13) anoint, <i>m</i> with.
(G 28) find; foll. by <i>sdmf</i> (perf., § 452, 1), § 184, 1. 2; by <i>sdm-nf</i> , § 185; by obj. + <i>sdmf</i> or <i>sdm-nf</i> , § 213; by obj. + <i>hr</i> + infn., § 304, 1; by obj. + old perf., § 315.	<i>gs</i> run (vb.).
mourning.	Kûs, Apollonos polis, a town in Upper Egypt.
espy, look at; <i>gmh</i> , same sense.	<i>gs</i> (O 37) tilt, slant (intrans.).
wick.	var. <i>gsti</i> (Aa 13) palette.
(Z 9) break up, break.	(V 33) kidney (?).
var. <i>gnwt</i> (N 33; T 19) annals; var. <i>gnwt</i> (?) sculptor.	var. <i>ggwt</i> (V 33), dazzled amazement, <i>hr</i> at.
see <i>gfn</i> above.	
(A 7) be soft, weak; <i>gnn</i> soften, weaken.	

Figure 2. The words in Gardiner’s grammar beginning with g-.

It can be seen that there are some differences between the order in Figure 1 and Gardiner’s order in Figure 2, but note that Gardiner’s is not algorithmically derived. For instance, Gardiner orders *gbb* < *Gb* < *Gbtîw* < *gb̄* < *gbgb*; according to Gardiner’s own alphabetical order one might expect *Gb* < *gb̄* < *gbb* < *gbgb* < *Gbtîw* (though perhaps Gardiner is using a root-based ordering). Our results gave *gb̄* < *gbb* < *Gb* < *gbgb* < *Gbtîw*, because the underlying spelling is *g-b-(b-̄)-̄-⤵* < *g-b-b-(g-b)* < *(g-b)-b-⤵* < *g-b-g-b-̄* < *g-b-(t-î-w)-⊗*.

Something else that will need to be dealt with is the question of characters with multiple readings. T019, the harpoon head of bone \ddagger , has two readings, *gn* and *ks*, and it is uncertain how a decision about “primary” values will be made. Second- and third-level ordering for homophones like $\text{Ⓜ} g$ and $\text{Ⓝ} g$ is also something we have not attempted in this exercise. Nevertheless, it seems clear that a phonetic-based ordering for Egyptian Hieroglyphs yields results which are more useful than binary ordering would yield.


Another way of illustrating this is to choose a set of words each beginning with a different letter of the Egyptian alphabet and order that according to phonetic value and according to binary order. The use of binary order apparently transforms Egyptian alphabetical order into *r, c, d, b, h, ̄, m, w, f, d̄, î, k̄, n, š, s/z, h, p, t, h̄, k, g, t, y, h̄*. Figure 3 shows the same set of words sorted in binary order. When we consulted with Egyptologists, they agreed that this order would not be useful to them.











	<i>dî hr gs</i>		<i>gr</i>		<i>gfn</i>
	<i>ghs</i>		<i>gr</i>		<i>gnf</i>
	<i>gmi</i>		<i>grg</i>		<i>gnf</i>
	<i>gmgm</i>		<i>grg</i>		<i>gnn</i>
	<i>gmh</i>		<i>grh</i>		<i>gnwt</i>
	<i>gmht</i>		<i>grh</i>		<i>gs</i>
	<i>gmw</i>		<i>grg</i>		<i>gs̄</i>
	<i>Gb</i>		<i>grg</i>		<i>gsw</i>
	<i>iwgrt</i>		<i>grt</i>		<i>ghs</i>
	<i>igrt</i>		<i>gb̄</i>		<i>ghs</i>
	<i>grh</i>		<i>gbb</i>		<i>ggwy</i>
	<i>gnwt</i>		<i>gb̄</i>		<i>ggt</i>
	<i>gnwt</i>		<i>gbgb</i>		<i>gstî</i>
	<i>gnwt</i>		<i>ḡw</i>		<i>gs</i>
	<i>grg</i>		<i>ḡwt</i>		<i>gs</i>
	<i>Gbb</i>		<i>ḡw</i>		<i>gsw</i>
	<i>Gbtîw</i>		<i>ḡw</i>		<i>gs-pr</i>
	<i>ggwt</i>		<i>gmt</i>		<i>gstî</i>
	<i>Gsy</i>		<i>gf</i>		<i>gs</i>

Figure 3. The words in Gardiner’s grammar beginning with $\text{Ⓜ} g-$, expanded to plain-text strings of characters and sorting in binary order.

10. The UniKemet database and future expansion of the repertoire. The database containing source references for the characters encoded has been named the *UniKemet* database after $\text{Ⓜ} \text{Ⓝ} \text{Ⓜ} Kmt$ “Egypt” since we considered a name like *UniHieroglyph* to be too general (given Anatolian Hieroglyphs, Maya Hieroglyphs, and Míkmaq Hieroglyphs). This database provides the means for Egyptologists to work with ISO/IEC JTC1/SC2/WG2 and with the Unicode Consortium to add Egyptian Hieroglyphs to the standard in future. Its structure is relatively straightforward; it contains the following fields:

Hex	The proposed U+1xxxx character code.
Name	The catalogue name of the character, such as A001, M013.
G1957	Citation from Gardiner 1957, giving page number and designation.
G1928	Citation from Gardiner 1928, giving page number and designation.
G1929	Citation from Gardiner 1929, giving page number and designation.
G1931	Citation from Gardiner 1931, giving page number and designation.
G1953	Citation from Gardiner 1953, giving page number and designation.
GITB	Citation from the Griffith Insititute <i>Topographical Bibliography</i> , giving volume, page number, and designation.
M1909	Citation from Möller 1909, giving page number and designation (only for number characters so far, here and for M1927 and M1936).
M1927	Citation from Möller 1927, giving page number and designation.
M1936	Citation from Möller 1936, giving page number and designation.
A1999	Citation from Allen 1999, giving page number and designation.
F1962	A field for citations from Faulkner 1962.
Uname	Calculation field that adds EGYPTIAN HIEROGLYPH to the Name field to produce the UCS names list.
Note	Notes which assist in the creation of the UCS names list.
Amd	A field which indicates the block or amendment into which a character is (to be) encoded, to assist in sorting the characters in order to produce the names list.
C2005	A temporary field containing the assignments in Richard Cook's L2/05-311, to assist members of the UTC who have reviewed that document in comparing it with the present document.

The intent of this database is that it will be a standard repository of those Egyptian characters which specialists deem suitable for formal encoding. Its citations are specific to a printed source, giving page number and an identifying designation given on that page. For example, the character  Z020 '9' is attested in Gardiner and in Möller. **G1957:197:9** means that it is attested in Gardiner 1957 on page 197 as "9" (since he did not assign a catalogue number to it). It is also attested in Möller as **M1909:59:AAa622** which means it is in Möller 1909 on page 59 in section "AA" subsection "a" with catalogue number 622. The full source citation format is "**G1957:197:9**" though at present the content of the G1957 field in the database is simply "**197:9**" because each source has its own field.

In future, when work for additions to the repertoire begins on materials from other sources, a unification process will be used where existing coded characters are first mapped to the content of those sources. Then we will be able to look at what is left over as sources for further standardization. Möller has many characters not found in other sources. For instance, standard Middle Egyptian writes  *pnw* 'mouse', but Möller cites  'mice' and so in due course the new character  **M1909:12:E131** could be standardized and added to the database. Other candidates for future addition to the database and to the UCS could be found in Faulkner 1986 (e.g.,  in  *py*, 'flea' ref. **F1962:88:py**) or in Hannig 2003 (e.g.,  in  *wbs*, 'to pile up' ref. **H2003:331:wbs**). If these three characters were being standardized as the next addition to the repertoire here, they would be assigned the names  EGYPTIAN HIEROGLYPH E039,  EGYPTIAN HIEROGLYPH L009, and  EGYPTIAN HIEROGLYPH M045 respectively.

A printout of the UniKemet database is attached at the end of this document; an electronic version of this draft can be found at in a tab-delimited text file at <http://www.evertype.com/standards/iso10646/pdf/unikemet-mappings-20070409.tab>. This file should be used for review only, and not for development as its contents will certainly change. To facilitate review, the sources have been made available at <http://std.dkuug.dk/jtc1/sc2/wg2/docs/n3182.pdf>.

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- Wikimedia's WikiHiero PHP script <http://meta.wikimedia.org/wiki/WikiHiero>

Acknowledgements

This project was made possible in part by a grant from the U.S. National Endowment for the Humanities, which funded the Universal Scripts Project (part of the Script Encoding Initiative at UC Berkeley).

A. Administrative

1. Title

Proposal to encode Egyptian Hieroglyphs in the SMP of the UCS

2. Requester's name

UC Berkeley Script Encoding Initiative (Universal Scripts Project); authors: Michael Everson and Bob Richmond

3. Requester type (Member body/Liaison/Individual contribution)

Liaison contribution.

4. Submission date

2007-04-10

5. Requester's reference (if applicable)

6. Choose one of the following:

6a. This is a complete proposal

Yes.

6b. More information will be provided later

No.

B. Technical – General

1. Choose one of the following:

1a. This proposal is for a new script (set of characters)

Yes.

1b. Proposed name of script

Egyptian Hieroglyphs.

1c. The proposal is for addition of character(s) to an existing block

No.

1d. Name of the existing block

2. Number of characters in proposal

1063.

3. Proposed category (A-Contemporary; B.1-Specialized (small collection); B.2-Specialized (large collection); C-Major extinct; D-Attested extinct; E-Minor extinct; F-Archaic Hieroglyphic or Ideographic; G-Obscure or questionable usage symbols)

Category F.

4a. Is a repertoire including character names provided?

Yes.

4b. If YES, are the names in accordance with the "character naming guidelines" in Annex L of P&P document?

Yes.

4c. Are the character shapes attached in a legible form suitable for review?

Yes.

5a. Who will provide the appropriate computerized font (ordered preference: True Type, or PostScript format) for publishing the standard?

Bob Richmond and Michael Everson. TrueType.

5b. If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools used:

Michael Everson, Fontographer and FontLab.

6a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?

Yes, see bibliography above.

6b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?

Yes.

7. Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)?

Yes, see above.

8. Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at <http://www.unicode.org> for such information on other scripts. Also see Unicode Character Database <http://www.unicode.org/Public/UNIDATA/UnicodeCharacterDatabase.html> and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

See above.

C. Technical – Justification

1. Has this proposal for addition of character(s) been submitted before? If YES, explain.

Yes. See N1636, N1944, L2/05-311, N3181, N3183.

2a. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)?

Yes.

2b. If YES, with whom?

John Baines, Jaromír Málek, Wolfgang Schenkel, Nigel Strudwick, Jochen Hallof, Mark-Jan Nederhof, Serge Rosmorduc, Hans van den Berg, Lee Collins, Richard Cook.

2c. If YES, available relevant documents

<http://titus.fkidg1.uni-frankfurt.de/unicode/iranian/3tagung.htm>

3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included?

Egyptologists and many enthusiasts worldwide.

4a. The context of use for the proposed characters (type of use; common or rare)

To write Egyptian.

4b. Reference

5a. Are the proposed characters in current use by the user community?

Yes.

5b. If YES, where?

By scholars and enthusiasts worldwide.

6a. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP?

No.

6b. If YES, is a rationale provided?

6c. If YES, reference

7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?

Yes.

8a. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?

No.

8b. If YES, is a rationale for its inclusion provided?

8c. If YES, reference

9a. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?

No.

9b. If YES, is a rationale for its inclusion provided?

9c. If YES, reference

10a. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character?

No. There is no question of unifying Egyptian Hieroglyphs with other scripts or symbols. U+2625 ANKH is not the same character as EGYPTIAN HIEROGLYPH S034, despite the origin of the former in the latter.

10b. If YES, is a rationale for its inclusion provided?

10c. If YES, reference

11a. Does the proposal include use of combining characters and/or use of composite sequences (see clauses 4.12 and 4.14 in ISO/IEC 10646-1: 2000)?

No.

11b. If YES, is a rationale for such use provided?

11c. If YES, reference

11d. Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?

No.

11e. If YES, reference

12a. Does the proposal contain characters with any special properties such as control function or similar semantics?

No.

12b. If YES, describe in detail (include attachment if necessary)

13a. Does the proposal contain any Ideographic compatibility character(s)?

No.

13b. If YES, is the equivalent corresponding unified ideographic character(s) identified?

	1300	1301	1302	1303	1304	1305	1306	1307	1308	1309	130A	130B	130C	130D
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2	13002	13012	13022	13032	13042	13052	13062	13072	13082	13092	130A2	130B2	130C2	130D2
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A	1300A	1301A	1302A	1303A	1304A	1305A	1306A	1307A	1308A	1309A	130AA	130BA	130CA	130DA
B	1300B	1301B	1302B	1303B	1304B	1305B	1306B	1307B	1308B	1309B	130AB	130BB	130CB	130DB
C	1300C	1301C	1302C	1303C	1304C	1305C	1306C	1307C	1308C	1309C	130AC	130BC	130CC	130DC
D	1300D	1301D	1302D	1303D	1304D	1305D	1306D	1307D	1308D	1309D	130AD	130BD	130CD	130DD
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F	1300F	1301F	1302F	1303F	1304F	1305F	1306F	1307F	1308F	1309F	130AF	130BF	130CF	130DF

	130E	130F	1310	1311	1312	1313	1314	1315	1316	1317	1318	1319	131A	131B
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





































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





















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



Note to reviewers: This is a preliminary proposal. The code points shown are merely suggestions for a possible placement.

A. Man and his occupations



























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 1300B  EGYPTIAN HIEROGLYPH A009
 1300C  EGYPTIAN HIEROGLYPH A010
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 1304C  EGYPTIAN HIEROGLYPH A067
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B. Woman and her occupations

















































13050  EGYPTIAN HIEROGLYPH B001
 13051  EGYPTIAN HIEROGLYPH B002
 13052  EGYPTIAN HIEROGLYPH B003
 13053  EGYPTIAN HIEROGLYPH B004
 13054  EGYPTIAN HIEROGLYPH B005
 13055  EGYPTIAN HIEROGLYPH B005A
 13056  EGYPTIAN HIEROGLYPH B006
 13057  EGYPTIAN HIEROGLYPH B007
 13058  EGYPTIAN HIEROGLYPH B008
 13059  EGYPTIAN HIEROGLYPH B009











































C. Anthropomorphic deities



1305A  EGYPTIAN HIEROGLYPH C001
 1305B  EGYPTIAN HIEROGLYPH C002
 1305C  EGYPTIAN HIEROGLYPH C002A
 1305D  EGYPTIAN HIEROGLYPH C002B
 1305E  EGYPTIAN HIEROGLYPH C002C
 1305F  EGYPTIAN HIEROGLYPH C003
 13060  EGYPTIAN HIEROGLYPH C004
 13061  EGYPTIAN HIEROGLYPH C005
 13062  EGYPTIAN HIEROGLYPH C006
 13063  EGYPTIAN HIEROGLYPH C007
 13064  EGYPTIAN HIEROGLYPH C008
 13065  EGYPTIAN HIEROGLYPH C009
 13066  EGYPTIAN HIEROGLYPH C010
 13067  EGYPTIAN HIEROGLYPH C010A
 13068  EGYPTIAN HIEROGLYPH C011
 = 1,000,000
 13069  EGYPTIAN HIEROGLYPH C012
 1306A  EGYPTIAN HIEROGLYPH C013
 1306B  EGYPTIAN HIEROGLYPH C014
 1306C  EGYPTIAN HIEROGLYPH C015
 1306D  EGYPTIAN HIEROGLYPH C016
 1306E  EGYPTIAN HIEROGLYPH C017
 1306F  EGYPTIAN HIEROGLYPH C018
 13070  EGYPTIAN HIEROGLYPH C019
 13071  EGYPTIAN HIEROGLYPH C020
 13072  EGYPTIAN HIEROGLYPH C021
 13073  EGYPTIAN HIEROGLYPH C022

13074  EGYPTIAN HIEROGLYPH C023
 13075  EGYPTIAN HIEROGLYPH C024














































D. Parts of the human body

13076  EGYPTIAN HIEROGLYPH D001
 13077  EGYPTIAN HIEROGLYPH D002
 13078  EGYPTIAN HIEROGLYPH D003
 13079  EGYPTIAN HIEROGLYPH D004
 1307A  EGYPTIAN HIEROGLYPH D005
 1307B  EGYPTIAN HIEROGLYPH D006
 1307C  EGYPTIAN HIEROGLYPH D007
 1307D  EGYPTIAN HIEROGLYPH D008
 1307E  EGYPTIAN HIEROGLYPH D008A
 1307F  EGYPTIAN HIEROGLYPH D009
 13080  EGYPTIAN HIEROGLYPH D010
 13081  EGYPTIAN HIEROGLYPH D011
 = 1/2
 13082  EGYPTIAN HIEROGLYPH D012
 = 1/4
 13083  EGYPTIAN HIEROGLYPH D013
 = 1/8
 13084  EGYPTIAN HIEROGLYPH D014
 = 1/16
 13085  EGYPTIAN HIEROGLYPH D015
 = 1/32
 13086  EGYPTIAN HIEROGLYPH D016
 = 1/64
 13087  EGYPTIAN HIEROGLYPH D017
 13088  EGYPTIAN HIEROGLYPH D018
 13089  EGYPTIAN HIEROGLYPH D019
 1308A  EGYPTIAN HIEROGLYPH D020
 1308B  EGYPTIAN HIEROGLYPH D021
 = r
 1308C  EGYPTIAN HIEROGLYPH D022
 1308D  EGYPTIAN HIEROGLYPH D023
 1308E  EGYPTIAN HIEROGLYPH D024
 1308F  EGYPTIAN HIEROGLYPH D025
 13090  EGYPTIAN HIEROGLYPH D026
 13091  EGYPTIAN HIEROGLYPH D027
 13092  EGYPTIAN HIEROGLYPH D027A
 13093  EGYPTIAN HIEROGLYPH D028
 13094  EGYPTIAN HIEROGLYPH D029
 13095  EGYPTIAN HIEROGLYPH D030
 13096  EGYPTIAN HIEROGLYPH D031
 13097  EGYPTIAN HIEROGLYPH D031A
 13098  EGYPTIAN HIEROGLYPH D032
 13099  EGYPTIAN HIEROGLYPH D033
 1309A  EGYPTIAN HIEROGLYPH D034
 1309B  EGYPTIAN HIEROGLYPH D034A
 1309C  EGYPTIAN HIEROGLYPH D035
 1309D  EGYPTIAN HIEROGLYPH D036
 = ayin
 → 05E2 ױ hebrew letter ayin
 → 0639 ع arabic letter ain
 → A725   latin small letter egyptological ain
 1309E  EGYPTIAN HIEROGLYPH D037
 1309F  EGYPTIAN HIEROGLYPH D038
 130A0  EGYPTIAN HIEROGLYPH D039
 130A1  EGYPTIAN HIEROGLYPH D040
 130A2  EGYPTIAN HIEROGLYPH D041
 130A3  EGYPTIAN HIEROGLYPH D042
 130A4  EGYPTIAN HIEROGLYPH D043
 130A5  EGYPTIAN HIEROGLYPH D044











130A6  EGYPTIAN HIEROGLYPH D045
 130A7  EGYPTIAN HIEROGLYPH D046
 = d
 130A8  EGYPTIAN HIEROGLYPH D046A
 130A9  EGYPTIAN HIEROGLYPH D047
 130AA  EGYPTIAN HIEROGLYPH D048
 130AB  EGYPTIAN HIEROGLYPH D048A
 130AC  EGYPTIAN HIEROGLYPH D049
 130AD  EGYPTIAN HIEROGLYPH D050
 = 10,000
 130AE  EGYPTIAN HIEROGLYPH D050A
 = 20,000
 130AF  EGYPTIAN HIEROGLYPH D050B
 = 30,000
 130B0  EGYPTIAN HIEROGLYPH D050C
 = 40,000
 130B1  EGYPTIAN HIEROGLYPH D050D
 = 50,000
 130B2  EGYPTIAN HIEROGLYPH D050E
 = 60,000
 130B3  EGYPTIAN HIEROGLYPH D050F
 = 70,000
 130B4  EGYPTIAN HIEROGLYPH D050G
 = 80,000
 130B5  EGYPTIAN HIEROGLYPH D050H
 = 90,000
 130B6  EGYPTIAN HIEROGLYPH D050I
 = 50,000
 130B7  EGYPTIAN HIEROGLYPH D051
 130B8  EGYPTIAN HIEROGLYPH D052
 130B9  EGYPTIAN HIEROGLYPH D052A
 130BA  EGYPTIAN HIEROGLYPH D053
 130BB  EGYPTIAN HIEROGLYPH D054
 130BC  EGYPTIAN HIEROGLYPH D054A
 130BD  EGYPTIAN HIEROGLYPH D055
 130BE  EGYPTIAN HIEROGLYPH D056
 130BF  EGYPTIAN HIEROGLYPH D057
 130C0  EGYPTIAN HIEROGLYPH D058
 = b
 130C1  EGYPTIAN HIEROGLYPH D059
 130C2  EGYPTIAN HIEROGLYPH D060
 130C3  EGYPTIAN HIEROGLYPH D061
 130C4  EGYPTIAN HIEROGLYPH D062
 130C5  EGYPTIAN HIEROGLYPH D063
 130C6  EGYPTIAN HIEROGLYPH D064
 130C7  EGYPTIAN HIEROGLYPH D065
 130C8  EGYPTIAN HIEROGLYPH D066
 130C9  EGYPTIAN HIEROGLYPH D067
 = 1 heqat measure
 130CA  EGYPTIAN HIEROGLYPH D067A
 = 2 heqat measures
 130CB  EGYPTIAN HIEROGLYPH D067B
 = 3 heqat measures
 130CC  EGYPTIAN HIEROGLYPH D067C
 = 4 heqat measures
 130CD  EGYPTIAN HIEROGLYPH D067D
 = 5 heqat measures
 130CE  EGYPTIAN HIEROGLYPH D067E
 = 6 heqat measures
 130CF  EGYPTIAN HIEROGLYPH D067F
 = 7 heqat measures







































130D0  EGYPTIAN HIEROGLYPH D067G
= 8 heqat measures
130D1  EGYPTIAN HIEROGLYPH D067H
= 9 heqat measures

E. Mammals
























































130D2  EGYPTIAN HIEROGLYPH E001
130D3  EGYPTIAN HIEROGLYPH E002
130D4  EGYPTIAN HIEROGLYPH E003
130D5  EGYPTIAN HIEROGLYPH E004
130D6  EGYPTIAN HIEROGLYPH E005
130D7  EGYPTIAN HIEROGLYPH E006
130D8  EGYPTIAN HIEROGLYPH E007
130D9  EGYPTIAN HIEROGLYPH E008
130DA  EGYPTIAN HIEROGLYPH E008A
130DB  EGYPTIAN HIEROGLYPH E009
130DC  EGYPTIAN HIEROGLYPH E009A
130DD  EGYPTIAN HIEROGLYPH E010
130DE  EGYPTIAN HIEROGLYPH E011
130DF  EGYPTIAN HIEROGLYPH E012
130E0  EGYPTIAN HIEROGLYPH E013
130E1  EGYPTIAN HIEROGLYPH E014
130E2  EGYPTIAN HIEROGLYPH E015
130E3  EGYPTIAN HIEROGLYPH E016
130E4  EGYPTIAN HIEROGLYPH E016A
130E5  EGYPTIAN HIEROGLYPH E017
130E6  EGYPTIAN HIEROGLYPH E017A
130E7  EGYPTIAN HIEROGLYPH E018
130E8  EGYPTIAN HIEROGLYPH E019
130E9  EGYPTIAN HIEROGLYPH E020
130EA  EGYPTIAN HIEROGLYPH E020A
130EB  EGYPTIAN HIEROGLYPH E021
130EC  EGYPTIAN HIEROGLYPH E022
130ED  EGYPTIAN HIEROGLYPH E023
130EE  EGYPTIAN HIEROGLYPH E024
130EF  EGYPTIAN HIEROGLYPH E025
130F0  EGYPTIAN HIEROGLYPH E026
130F1  EGYPTIAN HIEROGLYPH E027
130F2  EGYPTIAN HIEROGLYPH E028
130F3  EGYPTIAN HIEROGLYPH E028A
130F4  EGYPTIAN HIEROGLYPH E029
130F5  EGYPTIAN HIEROGLYPH E030
130F6  EGYPTIAN HIEROGLYPH E031
130F7  EGYPTIAN HIEROGLYPH E032
130F8  EGYPTIAN HIEROGLYPH E033
130F9  EGYPTIAN HIEROGLYPH E034
130FA  EGYPTIAN HIEROGLYPH E034A
130FB  EGYPTIAN HIEROGLYPH E035
130FC  EGYPTIAN HIEROGLYPH E036
130FD  EGYPTIAN HIEROGLYPH E037
130FE  EGYPTIAN HIEROGLYPH E038










F. Parts of mammals

130FF  EGYPTIAN HIEROGLYPH F001
13100  EGYPTIAN HIEROGLYPH F001A
13101  EGYPTIAN HIEROGLYPH F002
13102  EGYPTIAN HIEROGLYPH F003
13103  EGYPTIAN HIEROGLYPH F004
13104  EGYPTIAN HIEROGLYPH F005
13105  EGYPTIAN HIEROGLYPH F006
13106  EGYPTIAN HIEROGLYPH F007
13107  EGYPTIAN HIEROGLYPH F008
13108  EGYPTIAN HIEROGLYPH F009










13109  EGYPTIAN HIEROGLYPH F010
1310A  EGYPTIAN HIEROGLYPH F011
1310B  EGYPTIAN HIEROGLYPH F012
1310C  EGYPTIAN HIEROGLYPH F013
1310D  EGYPTIAN HIEROGLYPH F013A
1310E  EGYPTIAN HIEROGLYPH F014
1310F  EGYPTIAN HIEROGLYPH F015
13110  EGYPTIAN HIEROGLYPH F016
13111  EGYPTIAN HIEROGLYPH F017
13112  EGYPTIAN HIEROGLYPH F018
13113  EGYPTIAN HIEROGLYPH F019
13114  EGYPTIAN HIEROGLYPH F020
13115  EGYPTIAN HIEROGLYPH F021
13116  EGYPTIAN HIEROGLYPH F021A
13117  EGYPTIAN HIEROGLYPH F022
13118  EGYPTIAN HIEROGLYPH F023
13119  EGYPTIAN HIEROGLYPH F024
1311A  EGYPTIAN HIEROGLYPH F025
1311B  EGYPTIAN HIEROGLYPH F026
1311C  EGYPTIAN HIEROGLYPH F027
1311D  EGYPTIAN HIEROGLYPH F028
1311E  EGYPTIAN HIEROGLYPH F029
1311F  EGYPTIAN HIEROGLYPH F030
13120  EGYPTIAN HIEROGLYPH F031
13121  EGYPTIAN HIEROGLYPH F031A
13122  EGYPTIAN HIEROGLYPH F032
= h
→ 1E96  latin small letter h with line below
13123  EGYPTIAN HIEROGLYPH F033
13124  EGYPTIAN HIEROGLYPH F034
13125  EGYPTIAN HIEROGLYPH F035
13126  EGYPTIAN HIEROGLYPH F036
13127  EGYPTIAN HIEROGLYPH F037
13128  EGYPTIAN HIEROGLYPH F037A
13129  EGYPTIAN HIEROGLYPH F038
1312A  EGYPTIAN HIEROGLYPH F038A
1312B  EGYPTIAN HIEROGLYPH F039
1312C  EGYPTIAN HIEROGLYPH F040
1312D  EGYPTIAN HIEROGLYPH F041
1312E EGYPTIAN HIEROGLYPH F042
1312F EGYPTIAN HIEROGLYPH F043
13130 EGYPTIAN HIEROGLYPH F044
13131 EGYPTIAN HIEROGLYPH F045
13132 EGYPTIAN HIEROGLYPH F045A
13133 EGYPTIAN HIEROGLYPH F046
13134 EGYPTIAN HIEROGLYPH F046A
13135 EGYPTIAN HIEROGLYPH F047
13136 EGYPTIAN HIEROGLYPH F047A
13137 EGYPTIAN HIEROGLYPH F048
13138 EGYPTIAN HIEROGLYPH F049
13139 EGYPTIAN HIEROGLYPH F050
1313A EGYPTIAN HIEROGLYPH F051
1313B EGYPTIAN HIEROGLYPH F051A
1313C EGYPTIAN HIEROGLYPH F051B
1313D EGYPTIAN HIEROGLYPH F051C
1313E EGYPTIAN HIEROGLYPH F052
1313F EGYPTIAN HIEROGLYPH F053

G. Birds




















- 13140  EGYPTIAN HIEROGLYPH G001
= alef
→ 05D0 א hebrew letter alef
→ 0623 ا arabic letter alef with hamza above
→ A723 ã latin small letter egyptological alef
- 13141  EGYPTIAN HIEROGLYPH G002
- 13142  EGYPTIAN HIEROGLYPH G003
- 13143  EGYPTIAN HIEROGLYPH G004
- 13144  EGYPTIAN HIEROGLYPH G005
- 13145  EGYPTIAN HIEROGLYPH G006
- 13146  EGYPTIAN HIEROGLYPH G006A
- 13147  EGYPTIAN HIEROGLYPH G007
- 13148  EGYPTIAN HIEROGLYPH G007A
- 13149  EGYPTIAN HIEROGLYPH G007B
- 1314A  EGYPTIAN HIEROGLYPH G008
- 1314B  EGYPTIAN HIEROGLYPH G009
- 1314C  EGYPTIAN HIEROGLYPH G010
- 1314D  EGYPTIAN HIEROGLYPH G011
- 1314E  EGYPTIAN HIEROGLYPH G011A
- 1314F  EGYPTIAN HIEROGLYPH G012
- 13150  EGYPTIAN HIEROGLYPH G013
- 13151  EGYPTIAN HIEROGLYPH G014
- 13152  EGYPTIAN HIEROGLYPH G015
- 13153  EGYPTIAN HIEROGLYPH G016
- 13154  EGYPTIAN HIEROGLYPH G017
= m
- 13155  EGYPTIAN HIEROGLYPH G018
- 13156  EGYPTIAN HIEROGLYPH G019
- 13157  EGYPTIAN HIEROGLYPH G020
- 13158  EGYPTIAN HIEROGLYPH G020A
- 13159  EGYPTIAN HIEROGLYPH G021
- 1315A  EGYPTIAN HIEROGLYPH G022
- 1315B  EGYPTIAN HIEROGLYPH G023
- 1315C  EGYPTIAN HIEROGLYPH G024
- 1315D  EGYPTIAN HIEROGLYPH G025
- 1315E  EGYPTIAN HIEROGLYPH G026
- 1315F  EGYPTIAN HIEROGLYPH G026A
- 13160  EGYPTIAN HIEROGLYPH G027
- 13161  EGYPTIAN HIEROGLYPH G028
- 13162  EGYPTIAN HIEROGLYPH G029
- 13163  EGYPTIAN HIEROGLYPH G030
- 13164  EGYPTIAN HIEROGLYPH G031
- 13165  EGYPTIAN HIEROGLYPH G032
- 13166  EGYPTIAN HIEROGLYPH G033
- 13167  EGYPTIAN HIEROGLYPH G034
- 13168  EGYPTIAN HIEROGLYPH G035
- 13169  EGYPTIAN HIEROGLYPH G036
- 1316A  EGYPTIAN HIEROGLYPH G036A
- 1316B  EGYPTIAN HIEROGLYPH G037
- 1316C  EGYPTIAN HIEROGLYPH G037A
- 1316D  EGYPTIAN HIEROGLYPH G038
- 1316E  EGYPTIAN HIEROGLYPH G039
- 1316F  EGYPTIAN HIEROGLYPH G040
- 13170  EGYPTIAN HIEROGLYPH G041
- 13171  EGYPTIAN HIEROGLYPH G042
- 13172  EGYPTIAN HIEROGLYPH G043
= w
- 13173  EGYPTIAN HIEROGLYPH G043A
- 13174  EGYPTIAN HIEROGLYPH G044
- 13175  EGYPTIAN HIEROGLYPH G045
- 13176  EGYPTIAN HIEROGLYPH G045A

- 13177  EGYPTIAN HIEROGLYPH G046
- 13178  EGYPTIAN HIEROGLYPH G047
- 13179  EGYPTIAN HIEROGLYPH G048
- 1317A  EGYPTIAN HIEROGLYPH G049
- 1317B  EGYPTIAN HIEROGLYPH G050
- 1317C  EGYPTIAN HIEROGLYPH G051
- 1317D  EGYPTIAN HIEROGLYPH G052
- 1317E  EGYPTIAN HIEROGLYPH G053
- 1317F  EGYPTIAN HIEROGLYPH G054









H. Parts of birds

- 13180  EGYPTIAN HIEROGLYPH H001
- 13181  EGYPTIAN HIEROGLYPH H002
- 13182  EGYPTIAN HIEROGLYPH H003
- 13183  EGYPTIAN HIEROGLYPH H004
- 13184  EGYPTIAN HIEROGLYPH H005
- 13185  EGYPTIAN HIEROGLYPH H006
- 13186  EGYPTIAN HIEROGLYPH H006A
- 13187  EGYPTIAN HIEROGLYPH H007
- 13188  EGYPTIAN HIEROGLYPH H008







I. Amphibious animals, reptiles, etc.





- 13189  EGYPTIAN HIEROGLYPH I001
- 1318A  EGYPTIAN HIEROGLYPH I002
- 1318B  EGYPTIAN HIEROGLYPH I003
- 1318C  EGYPTIAN HIEROGLYPH I004
- 1318D  EGYPTIAN HIEROGLYPH I005
- 1318E  EGYPTIAN HIEROGLYPH I005A
- 1318F  EGYPTIAN HIEROGLYPH I006
- 13190  EGYPTIAN HIEROGLYPH I007
- 13191  EGYPTIAN HIEROGLYPH I008
= 100,000
- 13192  EGYPTIAN HIEROGLYPH I009
= f
- 13193  EGYPTIAN HIEROGLYPH I009A
- 13194  EGYPTIAN HIEROGLYPH I010
= dj
→ 1E0F d latin small letter d with line below
- 13195  EGYPTIAN HIEROGLYPH I010A
- 13196  EGYPTIAN HIEROGLYPH I011
- 13197  EGYPTIAN HIEROGLYPH I011A
- 13198  EGYPTIAN HIEROGLYPH I012
- 13199  EGYPTIAN HIEROGLYPH I013
- 1319A  EGYPTIAN HIEROGLYPH I014
- 1319B  EGYPTIAN HIEROGLYPH I015

K. Fishes and parts of fishes












































- 1319C  EGYPTIAN HIEROGLYPH K001
- 1319D  EGYPTIAN HIEROGLYPH K002
- 1319E  EGYPTIAN HIEROGLYPH K003
- 1319F  EGYPTIAN HIEROGLYPH K004
- 131A0  EGYPTIAN HIEROGLYPH K005
- 131A1  EGYPTIAN HIEROGLYPH K006
- 131A2  EGYPTIAN HIEROGLYPH K007
- 131A3  EGYPTIAN HIEROGLYPH K008
























L. Invertebrata and lesser animals

- 131A4  EGYPTIAN HIEROGLYPH L001
- 131A5  EGYPTIAN HIEROGLYPH L002
- 131A6  EGYPTIAN HIEROGLYPH L002A
- 131A7  EGYPTIAN HIEROGLYPH L003
- 131A8  EGYPTIAN HIEROGLYPH L004
- 131A9  EGYPTIAN HIEROGLYPH L005



































131AA  EGYPTIAN HIEROGLYPH L006
 131AB  EGYPTIAN HIEROGLYPH L006A
 131AC  EGYPTIAN HIEROGLYPH L007
 131AD  EGYPTIAN HIEROGLYPH L008







M. Trees and plants

131AE  EGYPTIAN HIEROGLYPH M001
 131AF  EGYPTIAN HIEROGLYPH M001A
 131B0  EGYPTIAN HIEROGLYPH M001B
 131B1  EGYPTIAN HIEROGLYPH M002
 131B2  EGYPTIAN HIEROGLYPH M003
 131B3  EGYPTIAN HIEROGLYPH M003A
 131B4  EGYPTIAN HIEROGLYPH M004
 131B5  EGYPTIAN HIEROGLYPH M005
 131B6  EGYPTIAN HIEROGLYPH M006
 131B7  EGYPTIAN HIEROGLYPH M007
 131B8  EGYPTIAN HIEROGLYPH M008
 131B9  EGYPTIAN HIEROGLYPH M009
 131BA  EGYPTIAN HIEROGLYPH M010
 131BB  EGYPTIAN HIEROGLYPH M010A
 131BC  EGYPTIAN HIEROGLYPH M011
 131BD  EGYPTIAN HIEROGLYPH M012
 = 1,000
 131BE  EGYPTIAN HIEROGLYPH M012A
 = 2,000
 131BF  EGYPTIAN HIEROGLYPH M012B
 = 3,000
 131C0  EGYPTIAN HIEROGLYPH M012C
 = 4,000
 131C1  EGYPTIAN HIEROGLYPH M012D
 = 5,000
 131C2  EGYPTIAN HIEROGLYPH M012E
 = 6,000
 131C3  EGYPTIAN HIEROGLYPH M012F
 = 7,000
 131C4  EGYPTIAN HIEROGLYPH M012G
 = 8,000
 131C5  EGYPTIAN HIEROGLYPH M012H
 = 9,000
 131C6  EGYPTIAN HIEROGLYPH M013
 131C7  EGYPTIAN HIEROGLYPH M014
 131C8  EGYPTIAN HIEROGLYPH M015
 131C9  EGYPTIAN HIEROGLYPH M015A
 131CA  EGYPTIAN HIEROGLYPH M016
 131CB  EGYPTIAN HIEROGLYPH M016A
 131CC  EGYPTIAN HIEROGLYPH M017
 = yod
 → 05D9 ם hebrew letter yod
 → 064A ﻲ arabic letter yeh
 131CD  EGYPTIAN HIEROGLYPH M017A
 = y
 → 133E5 Ⲛ egyptian hieroglyph z004
 131CE  EGYPTIAN HIEROGLYPH M018
 131CF  EGYPTIAN HIEROGLYPH M019
 131D0  EGYPTIAN HIEROGLYPH M020
 131D1  EGYPTIAN HIEROGLYPH M021
 131D2  EGYPTIAN HIEROGLYPH M022
 131D3  EGYPTIAN HIEROGLYPH M022A
 131D4  EGYPTIAN HIEROGLYPH M023
 131D5  EGYPTIAN HIEROGLYPH M024
 131D6  EGYPTIAN HIEROGLYPH M024A
 131D7  EGYPTIAN HIEROGLYPH M025
 131D8  EGYPTIAN HIEROGLYPH M026




131D9  EGYPTIAN HIEROGLYPH M027
 131DA  EGYPTIAN HIEROGLYPH M028
 131DB  EGYPTIAN HIEROGLYPH M028A
 131DC  EGYPTIAN HIEROGLYPH M029
 131DD  EGYPTIAN HIEROGLYPH M030
 131DE  EGYPTIAN HIEROGLYPH M031
 131DF  EGYPTIAN HIEROGLYPH M031A
 131E0  EGYPTIAN HIEROGLYPH M032
 131E1  EGYPTIAN HIEROGLYPH M033
 131E2  EGYPTIAN HIEROGLYPH M033A
 131E3  EGYPTIAN HIEROGLYPH M033B
 131E4  EGYPTIAN HIEROGLYPH M034
 131E5  EGYPTIAN HIEROGLYPH M035
 131E6  EGYPTIAN HIEROGLYPH M036
 131E7  EGYPTIAN HIEROGLYPH M037
 131E8  EGYPTIAN HIEROGLYPH M038
 131E9  EGYPTIAN HIEROGLYPH M039
 131EA  EGYPTIAN HIEROGLYPH M040
 131EB  EGYPTIAN HIEROGLYPH M040A
 131EC  EGYPTIAN HIEROGLYPH M041
 131ED  EGYPTIAN HIEROGLYPH M042
 131EE  EGYPTIAN HIEROGLYPH M043
 131EF  EGYPTIAN HIEROGLYPH M044

N. Sky, earth, water

131F0  EGYPTIAN HIEROGLYPH N001
 131F1  EGYPTIAN HIEROGLYPH N002
 131F2  EGYPTIAN HIEROGLYPH N003
 131F3  EGYPTIAN HIEROGLYPH N004
 131F4  EGYPTIAN HIEROGLYPH N005
 131F5  EGYPTIAN HIEROGLYPH N006
 131F6  EGYPTIAN HIEROGLYPH N007
 131F7  EGYPTIAN HIEROGLYPH N008
 131F8  EGYPTIAN HIEROGLYPH N009
 131F9  EGYPTIAN HIEROGLYPH N010
 131FA  EGYPTIAN HIEROGLYPH N011
 131FB  EGYPTIAN HIEROGLYPH N012
 131FC  EGYPTIAN HIEROGLYPH N013
 131FD  EGYPTIAN HIEROGLYPH N014
 131FE  EGYPTIAN HIEROGLYPH N015
 131FF  EGYPTIAN HIEROGLYPH N016
 13200  EGYPTIAN HIEROGLYPH N017
 13201  EGYPTIAN HIEROGLYPH N018
 13202  EGYPTIAN HIEROGLYPH N018A
 13203  EGYPTIAN HIEROGLYPH N018B
 13204  EGYPTIAN HIEROGLYPH N019
 13205  EGYPTIAN HIEROGLYPH N020
 13206  EGYPTIAN HIEROGLYPH N021
 13207  EGYPTIAN HIEROGLYPH N022
 13208  EGYPTIAN HIEROGLYPH N023
 13209  EGYPTIAN HIEROGLYPH N024
 1320A  EGYPTIAN HIEROGLYPH N025
 1320B  EGYPTIAN HIEROGLYPH N025A
 1320C  EGYPTIAN HIEROGLYPH N026
 1320D  EGYPTIAN HIEROGLYPH N027
 1320E  EGYPTIAN HIEROGLYPH N028
 1320F  EGYPTIAN HIEROGLYPH N029
 = q
 → 05E7 ק hebrew letter qof
 → 0642 ق arabic letter qaf
 → 1E33 ķ latin small letter k with dot below
 13210  EGYPTIAN HIEROGLYPH N030
 13211  EGYPTIAN HIEROGLYPH N031







13212  EGYPTIAN HIEROGLYPH N032
 13213  EGYPTIAN HIEROGLYPH N033
 13214  EGYPTIAN HIEROGLYPH N033A
 13215  EGYPTIAN HIEROGLYPH N034
 13216  EGYPTIAN HIEROGLYPH N034A
 13217  EGYPTIAN HIEROGLYPH N035

= n























13218  EGYPTIAN HIEROGLYPH N035A
 13219  EGYPTIAN HIEROGLYPH N036
 1321A  EGYPTIAN HIEROGLYPH N037

= sh




















→ 0161 š latin small letter s with caron





1321B  EGYPTIAN HIEROGLYPH N037A
 1321C  EGYPTIAN HIEROGLYPH N038
 1321D  EGYPTIAN HIEROGLYPH N039
 1321E  EGYPTIAN HIEROGLYPH N040
 1321F  EGYPTIAN HIEROGLYPH N041
 13220  EGYPTIAN HIEROGLYPH N042

NL. Nomes of Lower Egypt














































13221  EGYPTIAN HIEROGLYPH NL001
 13222  EGYPTIAN HIEROGLYPH NL002
 13223  EGYPTIAN HIEROGLYPH NL003
 13224  EGYPTIAN HIEROGLYPH NL004
 13225  EGYPTIAN HIEROGLYPH NL005
 13226  EGYPTIAN HIEROGLYPH NL005A
 13227  EGYPTIAN HIEROGLYPH NL006
 13228  EGYPTIAN HIEROGLYPH NL007
 13229  EGYPTIAN HIEROGLYPH NL008
 1322A  EGYPTIAN HIEROGLYPH NL009
 1322B  EGYPTIAN HIEROGLYPH NL010
 1322C  EGYPTIAN HIEROGLYPH NL011
 1322D  EGYPTIAN HIEROGLYPH NL012
 1322E  EGYPTIAN HIEROGLYPH NL013
 1322F  EGYPTIAN HIEROGLYPH NL014
 13230  EGYPTIAN HIEROGLYPH NL015
 13231  EGYPTIAN HIEROGLYPH NL016
 13232  EGYPTIAN HIEROGLYPH NL017
 13233  EGYPTIAN HIEROGLYPH NL017A
 13234  EGYPTIAN HIEROGLYPH NL018
 13235  EGYPTIAN HIEROGLYPH NL019
 13236  EGYPTIAN HIEROGLYPH NL020


































NU. Nomes of Upper Egypt

13237  EGYPTIAN HIEROGLYPH NU001
 13238  EGYPTIAN HIEROGLYPH NU002
 13239  EGYPTIAN HIEROGLYPH NU003
 1323A  EGYPTIAN HIEROGLYPH NU004
 1323B  EGYPTIAN HIEROGLYPH NU005
 1323C  EGYPTIAN HIEROGLYPH NU006
 1323D  EGYPTIAN HIEROGLYPH NU007
 1323E  EGYPTIAN HIEROGLYPH NU008
 1323F  EGYPTIAN HIEROGLYPH NU009
 13240  EGYPTIAN HIEROGLYPH NU010
 13241  EGYPTIAN HIEROGLYPH NU010A
 13242  EGYPTIAN HIEROGLYPH NU011
 13243  EGYPTIAN HIEROGLYPH NU011A
 13244  EGYPTIAN HIEROGLYPH NU012
 13245  EGYPTIAN HIEROGLYPH NU013
 13246  EGYPTIAN HIEROGLYPH NU014
 13247  EGYPTIAN HIEROGLYPH NU015
 13248  EGYPTIAN HIEROGLYPH NU016
 13249  EGYPTIAN HIEROGLYPH NU017














1324A  EGYPTIAN HIEROGLYPH NU018
 1324B  EGYPTIAN HIEROGLYPH NU018A
 1324C  EGYPTIAN HIEROGLYPH NU019
 1324D  EGYPTIAN HIEROGLYPH NU020
 1324E  EGYPTIAN HIEROGLYPH NU021
 1324F  EGYPTIAN HIEROGLYPH NU022
 13250  EGYPTIAN HIEROGLYPH NU022A

O. Buildings, parts of buildings, etc.







13251  EGYPTIAN HIEROGLYPH O001
 13252  EGYPTIAN HIEROGLYPH O001A
 13253  EGYPTIAN HIEROGLYPH O002
 13254  EGYPTIAN HIEROGLYPH O003
 13255  EGYPTIAN HIEROGLYPH O004
 = h
 → 05D4 ה hebrew letter he
 → 0647 ه arabic letter heh
 13256  EGYPTIAN HIEROGLYPH O005
 13257  EGYPTIAN HIEROGLYPH O005A
 13258  EGYPTIAN HIEROGLYPH O006
 13259  EGYPTIAN HIEROGLYPH O006A
 = beginning of hwt or serekh enclosure
 → 13283  egyptian hieroglyph o033a
 1325A  EGYPTIAN HIEROGLYPH O006B
 = beginning of low hwt enclosure
 1325B  EGYPTIAN HIEROGLYPH O006C
 = beginning of high hwt enclosure
 1325C  EGYPTIAN HIEROGLYPH O006D
 = end of high hwt enclosure
 1325D  EGYPTIAN HIEROGLYPH O006E
 = end of low hwt enclosure
 1325E  EGYPTIAN HIEROGLYPH O006F
 = end of hwt enclosure
 1325F  EGYPTIAN HIEROGLYPH O007
 13260  EGYPTIAN HIEROGLYPH O008
 13261  EGYPTIAN HIEROGLYPH O009
 13262  EGYPTIAN HIEROGLYPH O010
 13263  EGYPTIAN HIEROGLYPH O010A
 13264  EGYPTIAN HIEROGLYPH O010B
 13265  EGYPTIAN HIEROGLYPH O010C
 13266  EGYPTIAN HIEROGLYPH O011
 13267  EGYPTIAN HIEROGLYPH O012
 13268  EGYPTIAN HIEROGLYPH O013
 13269  EGYPTIAN HIEROGLYPH O014
 1326A  EGYPTIAN HIEROGLYPH O015
 1326B  EGYPTIAN HIEROGLYPH O016
 1326C  EGYPTIAN HIEROGLYPH O017
 1326D  EGYPTIAN HIEROGLYPH O018
 1326E  EGYPTIAN HIEROGLYPH O019
 1326F  EGYPTIAN HIEROGLYPH O019A
 13270  EGYPTIAN HIEROGLYPH O020
 13271  EGYPTIAN HIEROGLYPH O020A
 13272  EGYPTIAN HIEROGLYPH O021
 13273  EGYPTIAN HIEROGLYPH O022
 13274  EGYPTIAN HIEROGLYPH O023
 13275  EGYPTIAN HIEROGLYPH O024
 13276  EGYPTIAN HIEROGLYPH O024A
 13277  EGYPTIAN HIEROGLYPH O025
 13278  EGYPTIAN HIEROGLYPH O025A
 13279  EGYPTIAN HIEROGLYPH O026
 1327A  EGYPTIAN HIEROGLYPH O027
 1327B  EGYPTIAN HIEROGLYPH O028
 1327C  EGYPTIAN HIEROGLYPH O029

- 1327D  EGYPTIAN HIEROGLYPH O029A
 1327E  EGYPTIAN HIEROGLYPH O030
 1327F  EGYPTIAN HIEROGLYPH O030A
 13280  EGYPTIAN HIEROGLYPH O031
 13281  EGYPTIAN HIEROGLYPH O032
 13282  EGYPTIAN HIEROGLYPH O033
 13283  EGYPTIAN HIEROGLYPH O033A
 = end of serekh enclosure
 → 13258  egyptian hieroglyph o006a
 13284  EGYPTIAN HIEROGLYPH O034
 = s, z
 → 132F3  egyptian hieroglyph s029
 13285  EGYPTIAN HIEROGLYPH O035
 13286  EGYPTIAN HIEROGLYPH O036
 13287  EGYPTIAN HIEROGLYPH O036A
 = beginning of fortified wall cartouche
 13288  EGYPTIAN HIEROGLYPH O036B
 = end of fortified wall cartouche
 13289  EGYPTIAN HIEROGLYPH O036C
 = beginning of fortified wall enclosure
 1328A  EGYPTIAN HIEROGLYPH O036D
 = end of fortified wall enclosure
 1328B  EGYPTIAN HIEROGLYPH O037
 1328C  EGYPTIAN HIEROGLYPH O038
 1328D  EGYPTIAN HIEROGLYPH O039
 1328E  EGYPTIAN HIEROGLYPH O040
 1328F  EGYPTIAN HIEROGLYPH O041
 13290  EGYPTIAN HIEROGLYPH O042
 13291  EGYPTIAN HIEROGLYPH O043
 13292  EGYPTIAN HIEROGLYPH O044
 13293  EGYPTIAN HIEROGLYPH O045
 13294  EGYPTIAN HIEROGLYPH O046
 13295  EGYPTIAN HIEROGLYPH O047
 13296  EGYPTIAN HIEROGLYPH O048
 13297  EGYPTIAN HIEROGLYPH O049
 13298  EGYPTIAN HIEROGLYPH O050
 13299  EGYPTIAN HIEROGLYPH O050A
 1329A  EGYPTIAN HIEROGLYPH O050B
 1329B  EGYPTIAN HIEROGLYPH O051

P. Ships and parts of ships



































- 1329C  EGYPTIAN HIEROGLYPH P001
 1329D  EGYPTIAN HIEROGLYPH P001A
 1329E  EGYPTIAN HIEROGLYPH P002
 1329F  EGYPTIAN HIEROGLYPH P003
 132A0  EGYPTIAN HIEROGLYPH P003A
 132A1  EGYPTIAN HIEROGLYPH P004
 132A2  EGYPTIAN HIEROGLYPH P005
 132A3  EGYPTIAN HIEROGLYPH P006
 132A4  EGYPTIAN HIEROGLYPH P007
 132A5  EGYPTIAN HIEROGLYPH P008
 132A6  EGYPTIAN HIEROGLYPH P009
 132A7  EGYPTIAN HIEROGLYPH P010
 132A8  EGYPTIAN HIEROGLYPH P011

Q. Domestic and funerary furniture

























- 132A9  EGYPTIAN HIEROGLYPH Q001
 132AA  EGYPTIAN HIEROGLYPH Q002
 132AB  EGYPTIAN HIEROGLYPH Q003
 = p
 132AC  EGYPTIAN HIEROGLYPH Q004
 132AD  EGYPTIAN HIEROGLYPH Q005
 132AE  EGYPTIAN HIEROGLYPH Q006






























- 132AF  EGYPTIAN HIEROGLYPH Q007

R. Temple furniture and sacred emblems
































- 132B0  EGYPTIAN HIEROGLYPH R001
 132B1  EGYPTIAN HIEROGLYPH R002
 132B2  EGYPTIAN HIEROGLYPH R002A
 132B3  EGYPTIAN HIEROGLYPH R003
 132B4  EGYPTIAN HIEROGLYPH R003A
 132B5  EGYPTIAN HIEROGLYPH R003B
 132B6  EGYPTIAN HIEROGLYPH R004
 132B7  EGYPTIAN HIEROGLYPH R005
 132B8  EGYPTIAN HIEROGLYPH R006
 132B9  EGYPTIAN HIEROGLYPH R007
 132BA  EGYPTIAN HIEROGLYPH R008
 132BB  EGYPTIAN HIEROGLYPH R009
 132BC  EGYPTIAN HIEROGLYPH R010
 132BD  EGYPTIAN HIEROGLYPH R010A
 132BE  EGYPTIAN HIEROGLYPH R011
 132BF  EGYPTIAN HIEROGLYPH R012
 132C0  EGYPTIAN HIEROGLYPH R013
 132C1  EGYPTIAN HIEROGLYPH R014
 132C2  EGYPTIAN HIEROGLYPH R015
 132C3  EGYPTIAN HIEROGLYPH R016
 132C4  EGYPTIAN HIEROGLYPH R016A
 132C5  EGYPTIAN HIEROGLYPH R017
 132C6  EGYPTIAN HIEROGLYPH R018
 132C7  EGYPTIAN HIEROGLYPH R019
 132C8  EGYPTIAN HIEROGLYPH R020
 132C9  EGYPTIAN HIEROGLYPH R021
 132CA  EGYPTIAN HIEROGLYPH R022
 132CB  EGYPTIAN HIEROGLYPH R023
 132CC  EGYPTIAN HIEROGLYPH R024
 132CD  EGYPTIAN HIEROGLYPH R025
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 132D0  EGYPTIAN HIEROGLYPH R028
 132D1  EGYPTIAN HIEROGLYPH R029














S. Crowns, dress, staves, etc.

- 132D2  EGYPTIAN HIEROGLYPH S001
 132D3  EGYPTIAN HIEROGLYPH S002
 132D4  EGYPTIAN HIEROGLYPH S002A
 132D5  EGYPTIAN HIEROGLYPH S003
 132D6  EGYPTIAN HIEROGLYPH S004
 132D7  EGYPTIAN HIEROGLYPH S005
 132D8  EGYPTIAN HIEROGLYPH S006
 132D9  EGYPTIAN HIEROGLYPH S006A
 132DA  EGYPTIAN HIEROGLYPH S007
 132DB  EGYPTIAN HIEROGLYPH S008
 132DC  EGYPTIAN HIEROGLYPH S009
 132DD  EGYPTIAN HIEROGLYPH S010
 132DE  EGYPTIAN HIEROGLYPH S011
 132DF  EGYPTIAN HIEROGLYPH S012
 132E0  EGYPTIAN HIEROGLYPH S013
 132E1  EGYPTIAN HIEROGLYPH S014
 132E2  EGYPTIAN HIEROGLYPH S014A
 132E3  EGYPTIAN HIEROGLYPH S014B
 132E4  EGYPTIAN HIEROGLYPH S015
 132E5  EGYPTIAN HIEROGLYPH S016
 132E6  EGYPTIAN HIEROGLYPH S017
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 132E8  EGYPTIAN HIEROGLYPH S018
 132E9  EGYPTIAN HIEROGLYPH S019
















































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 132EF  EGYPTIAN HIEROGLYPH S025
 132F0  EGYPTIAN HIEROGLYPH S026
 132F1  EGYPTIAN HIEROGLYPH S027
 132F2  EGYPTIAN HIEROGLYPH S028
 132F3  EGYPTIAN HIEROGLYPH S029
 = s, z
 → 13284  egyptian hieroglyph o034
 132F4  EGYPTIAN HIEROGLYPH S030
 132F5  EGYPTIAN HIEROGLYPH S031
 132F6  EGYPTIAN HIEROGLYPH S032
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 132FF  EGYPTIAN HIEROGLYPH S040
 13300  EGYPTIAN HIEROGLYPH S041
 13301  EGYPTIAN HIEROGLYPH S042
 13302  EGYPTIAN HIEROGLYPH S043
 13303  EGYPTIAN HIEROGLYPH S044
 13304  EGYPTIAN HIEROGLYPH S045
 13305  EGYPTIAN HIEROGLYPH S046

T. Warfare, hunting, butchery

13306  EGYPTIAN HIEROGLYPH T001
 13307  EGYPTIAN HIEROGLYPH T002
 13308  EGYPTIAN HIEROGLYPH T003
 13309  EGYPTIAN HIEROGLYPH T003A
 1330A  EGYPTIAN HIEROGLYPH T004
 1330B  EGYPTIAN HIEROGLYPH T005
 1330C  EGYPTIAN HIEROGLYPH T006
 1330D  EGYPTIAN HIEROGLYPH T007
 1330E  EGYPTIAN HIEROGLYPH T007A
 1330F  EGYPTIAN HIEROGLYPH T008
 13310  EGYPTIAN HIEROGLYPH T008A
 13311  EGYPTIAN HIEROGLYPH T009
 13312  EGYPTIAN HIEROGLYPH T009A
 13313  EGYPTIAN HIEROGLYPH T010
 13314  EGYPTIAN HIEROGLYPH T011
 13315  EGYPTIAN HIEROGLYPH T011A
 13316  EGYPTIAN HIEROGLYPH T012
 13317  EGYPTIAN HIEROGLYPH T013
 13318  EGYPTIAN HIEROGLYPH T014
 13319  EGYPTIAN HIEROGLYPH T015
 1331A  EGYPTIAN HIEROGLYPH T016
 1331B  EGYPTIAN HIEROGLYPH T016A
 1331C  EGYPTIAN HIEROGLYPH T017
 1331D  EGYPTIAN HIEROGLYPH T018
 1331E  EGYPTIAN HIEROGLYPH T019
 1331F  EGYPTIAN HIEROGLYPH T020
 13320  EGYPTIAN HIEROGLYPH T021
 13321  EGYPTIAN HIEROGLYPH T022
 13322  EGYPTIAN HIEROGLYPH T023
 13323  EGYPTIAN HIEROGLYPH T024
 13324  EGYPTIAN HIEROGLYPH T025

13325  EGYPTIAN HIEROGLYPH T026
 13326  EGYPTIAN HIEROGLYPH T027
 13327  EGYPTIAN HIEROGLYPH T028
 13328  EGYPTIAN HIEROGLYPH T029
 13329  EGYPTIAN HIEROGLYPH T030
 1332A  EGYPTIAN HIEROGLYPH T031
 1332B  EGYPTIAN HIEROGLYPH T032
 1332C  EGYPTIAN HIEROGLYPH T032A
 1332D  EGYPTIAN HIEROGLYPH T033
 1332E  EGYPTIAN HIEROGLYPH T033A
 1332F  EGYPTIAN HIEROGLYPH T034
 13330  EGYPTIAN HIEROGLYPH T035
 13331  EGYPTIAN HIEROGLYPH T036

U. Agriculture, crafts, and professions

13332  EGYPTIAN HIEROGLYPH U001
 13333  EGYPTIAN HIEROGLYPH U002
 13334  EGYPTIAN HIEROGLYPH U003
 13335  EGYPTIAN HIEROGLYPH U004
 13336  EGYPTIAN HIEROGLYPH U005
 13337  EGYPTIAN HIEROGLYPH U006
 13338  EGYPTIAN HIEROGLYPH U006A
 13339  EGYPTIAN HIEROGLYPH U006B
 1333A  EGYPTIAN HIEROGLYPH U007
 1333B  EGYPTIAN HIEROGLYPH U008
 1333C  EGYPTIAN HIEROGLYPH U009
 1333D  EGYPTIAN HIEROGLYPH U010
 1333E  EGYPTIAN HIEROGLYPH U011
 1333F  EGYPTIAN HIEROGLYPH U012
 13340  EGYPTIAN HIEROGLYPH U013
 13341  EGYPTIAN HIEROGLYPH U014
 13342  EGYPTIAN HIEROGLYPH U015
 13343  EGYPTIAN HIEROGLYPH U016
 13344  EGYPTIAN HIEROGLYPH U017
 13345  EGYPTIAN HIEROGLYPH U018
 13346  EGYPTIAN HIEROGLYPH U019
 13347  EGYPTIAN HIEROGLYPH U020
 13348  EGYPTIAN HIEROGLYPH U021
 13349  EGYPTIAN HIEROGLYPH U022
 1334A  EGYPTIAN HIEROGLYPH U023
 1334B  EGYPTIAN HIEROGLYPH U023A
 1334C  EGYPTIAN HIEROGLYPH U024
 1334D  EGYPTIAN HIEROGLYPH U025
 1334E  EGYPTIAN HIEROGLYPH U026
 1334F  EGYPTIAN HIEROGLYPH U027
 13350  EGYPTIAN HIEROGLYPH U028
 13351  EGYPTIAN HIEROGLYPH U029
 13352  EGYPTIAN HIEROGLYPH U029A
 13353  EGYPTIAN HIEROGLYPH U030
 13354  EGYPTIAN HIEROGLYPH U031
 13355  EGYPTIAN HIEROGLYPH U032
 13356  EGYPTIAN HIEROGLYPH U032A
 13357  EGYPTIAN HIEROGLYPH U033
 13358  EGYPTIAN HIEROGLYPH U034
 13359  EGYPTIAN HIEROGLYPH U035
 1335A  EGYPTIAN HIEROGLYPH U036
 1335B  EGYPTIAN HIEROGLYPH U037
 1335C  EGYPTIAN HIEROGLYPH U038
 1335D  EGYPTIAN HIEROGLYPH U039
 1335E  EGYPTIAN HIEROGLYPH U040
 1335F  EGYPTIAN HIEROGLYPH U041
 13360  EGYPTIAN HIEROGLYPH U042

V. Rope, fibre, baskets, bags, etc.

13361	𐀀	EGYPTIAN HIEROGLYPH V001	= 100
13362	𐀁	EGYPTIAN HIEROGLYPH V001A	= 200
13363	𐀂	EGYPTIAN HIEROGLYPH V001B	= 300
13364	𐀃	EGYPTIAN HIEROGLYPH V001C	= 400
13365	𐀄	EGYPTIAN HIEROGLYPH V001D	= 500
13366	𐀅	EGYPTIAN HIEROGLYPH V001E	= 600
13367	𐀆	EGYPTIAN HIEROGLYPH V001F	= 700
13368	𐀇	EGYPTIAN HIEROGLYPH V001G	= 800
13369	𐀈	EGYPTIAN HIEROGLYPH V001H	= 900
1336A	𐀉	EGYPTIAN HIEROGLYPH V001I	= 500
1336B	𐀊	EGYPTIAN HIEROGLYPH V002	
1336C	𐀋	EGYPTIAN HIEROGLYPH V002A	
1336D	𐀌	EGYPTIAN HIEROGLYPH V003	
1336E	𐀍	EGYPTIAN HIEROGLYPH V004	
1336F	𐀎	EGYPTIAN HIEROGLYPH V005	
13370	𐀏	EGYPTIAN HIEROGLYPH V006	
13371	𐀐	EGYPTIAN HIEROGLYPH V007	
13372	𐀑	EGYPTIAN HIEROGLYPH V007A	
13373	𐀒	EGYPTIAN HIEROGLYPH V007B	
13374	𐀓	EGYPTIAN HIEROGLYPH V008	
13375	𐀔	EGYPTIAN HIEROGLYPH V009	
13376	𐀕	EGYPTIAN HIEROGLYPH V010	
13377	𐀖	EGYPTIAN HIEROGLYPH V011	
13378	𐀗	EGYPTIAN HIEROGLYPH V011A	= beginning of cartouche
13379	𐀘	EGYPTIAN HIEROGLYPH V011B	= end of cartouche
1337A	𐀙	EGYPTIAN HIEROGLYPH V011C	= end of knotless cartouche
1337B	𐀚	EGYPTIAN HIEROGLYPH V012	
1337C	𐀛	EGYPTIAN HIEROGLYPH V012A	
1337D	𐀜	EGYPTIAN HIEROGLYPH V012B	
1337E	𐀝	EGYPTIAN HIEROGLYPH V013	= tj → 1E6F t latin small letter t with line below
1337F	𐀞	EGYPTIAN HIEROGLYPH V014	
13380	𐀟	EGYPTIAN HIEROGLYPH V015	
13381	𐀠	EGYPTIAN HIEROGLYPH V016	
13382	𐀡	EGYPTIAN HIEROGLYPH V017	
13383	𐀢	EGYPTIAN HIEROGLYPH V018	
13384	𐀣	EGYPTIAN HIEROGLYPH V019	
13385	𐀤	EGYPTIAN HIEROGLYPH V020	= 10
13386	𐀥	EGYPTIAN HIEROGLYPH V020A	= 20
13387	𐀦	EGYPTIAN HIEROGLYPH V020B	= 30
13388	𐀧	EGYPTIAN HIEROGLYPH V020C	= 40
13389	𐀨	EGYPTIAN HIEROGLYPH V020D	= 50

1338A	𐀩	EGYPTIAN HIEROGLYPH V020E	= 60
1338B	𐀪	EGYPTIAN HIEROGLYPH V020F	= 70
1338C	𐀫	EGYPTIAN HIEROGLYPH V020G	= 80
1338D	𐀬	EGYPTIAN HIEROGLYPH V020H	= 90
1338E	𐀭	EGYPTIAN HIEROGLYPH V020I	= 20
1338F	𐀮	EGYPTIAN HIEROGLYPH V020J	= 30
13390	𐀯	EGYPTIAN HIEROGLYPH V020K	= 40
13391	𐀰	EGYPTIAN HIEROGLYPH V020L	= 50
13392	𐀱	EGYPTIAN HIEROGLYPH V021	
13393	𐀲	EGYPTIAN HIEROGLYPH V022	
13394	𐀳	EGYPTIAN HIEROGLYPH V023	
13395	𐀴	EGYPTIAN HIEROGLYPH V023A	
13396	𐀵	EGYPTIAN HIEROGLYPH V024	
13397	𐀶	EGYPTIAN HIEROGLYPH V025	
13398	𐀷	EGYPTIAN HIEROGLYPH V026	
13399	𐀸	EGYPTIAN HIEROGLYPH V027	
1339A	𐀹	EGYPTIAN HIEROGLYPH V028	= h → 062D ح arabic letter hah → 1E25 h latin small letter h with dot below
1339B	𐀺	EGYPTIAN HIEROGLYPH V028A	
1339C	𐀻	EGYPTIAN HIEROGLYPH V029	
1339D	𐀼	EGYPTIAN HIEROGLYPH V029A	
1339E	𐀽	EGYPTIAN HIEROGLYPH V030	
1339F	𐀾	EGYPTIAN HIEROGLYPH V030A	
133A0	𐀿	EGYPTIAN HIEROGLYPH V031	= k → 05DB כ hebrew letter kaf → 0643 ك arabic letter kaf
133A1	𐁀	EGYPTIAN HIEROGLYPH V031A	
133A2	𐁁	EGYPTIAN HIEROGLYPH V032	
133A3	𐁂	EGYPTIAN HIEROGLYPH V033	
133A4	𐁃	EGYPTIAN HIEROGLYPH V033A	
133A5	𐁄	EGYPTIAN HIEROGLYPH V034	
133A6	𐁅	EGYPTIAN HIEROGLYPH V035	
133A7	𐁆	EGYPTIAN HIEROGLYPH V036	
133A8	𐁇	EGYPTIAN HIEROGLYPH V037	
133A9	𐁈	EGYPTIAN HIEROGLYPH V037A	
133AA	𐁉	EGYPTIAN HIEROGLYPH V038	
133AB	𐁊	EGYPTIAN HIEROGLYPH V039	
133AC	𐁋	EGYPTIAN HIEROGLYPH V040	= 10 in dates
133AD	𐁌	EGYPTIAN HIEROGLYPH V040A	= 20 in dates

W. Vessels of stone and earthenware

133AE	𐁍	EGYPTIAN HIEROGLYPH W001	
133AF	𐁎	EGYPTIAN HIEROGLYPH W002	
133B0	𐁏	EGYPTIAN HIEROGLYPH W003	
133B1	𐁐	EGYPTIAN HIEROGLYPH W003A	
133B2	𐁑	EGYPTIAN HIEROGLYPH W004	
133B3	𐁒	EGYPTIAN HIEROGLYPH W005	
133B4	𐁓	EGYPTIAN HIEROGLYPH W006	
133B5	𐁔	EGYPTIAN HIEROGLYPH W007	
133B6	𐁕	EGYPTIAN HIEROGLYPH W008	

133B7 𐦇 EGYPTIAN HIEROGLYPH W009
 133B8 𐦈 EGYPTIAN HIEROGLYPH W009A
 133B9 𐦉 EGYPTIAN HIEROGLYPH W010
 133BA 𐦊 EGYPTIAN HIEROGLYPH W010A
 133BB 𐦋 EGYPTIAN HIEROGLYPH W011
 = g
 133BC 𐦌 EGYPTIAN HIEROGLYPH W012
 133BD 𐦍 EGYPTIAN HIEROGLYPH W013
 133BE 𐦎 EGYPTIAN HIEROGLYPH W014
 133BF 𐦏 EGYPTIAN HIEROGLYPH W014A
 133C0 𐦐 EGYPTIAN HIEROGLYPH W015
 133C1 𐦑 EGYPTIAN HIEROGLYPH W016
 133C2 𐦒 EGYPTIAN HIEROGLYPH W017
 133C3 𐦓 EGYPTIAN HIEROGLYPH W017A
 133C4 𐦔 EGYPTIAN HIEROGLYPH W018
 133C5 𐦕 EGYPTIAN HIEROGLYPH W018A
 133C6 𐦖 EGYPTIAN HIEROGLYPH W019
 133C7 𐦗 EGYPTIAN HIEROGLYPH W020
 133C8 𐦘 EGYPTIAN HIEROGLYPH W021
 133C9 𐦙 EGYPTIAN HIEROGLYPH W022
 133CA 𐦚 EGYPTIAN HIEROGLYPH W023
 133CB 𐦛 EGYPTIAN HIEROGLYPH W024
 133CC 𐦜 EGYPTIAN HIEROGLYPH W024A
 133CD 𐦝 EGYPTIAN HIEROGLYPH W025

X. Loaves and cakes

133CE 𐦞 EGYPTIAN HIEROGLYPH X001
 = t
 133CF 𐦟 EGYPTIAN HIEROGLYPH X002
 133D0 𐦠 EGYPTIAN HIEROGLYPH X003
 133D1 𐦡 EGYPTIAN HIEROGLYPH X004
 133D2 𐦢 EGYPTIAN HIEROGLYPH X004A
 133D3 𐦣 EGYPTIAN HIEROGLYPH X005
 133D4 𐦤 EGYPTIAN HIEROGLYPH X006
 133D5 𐦥 EGYPTIAN HIEROGLYPH X006A
 133D6 𐦦 EGYPTIAN HIEROGLYPH X007
 133D7 𐦧 EGYPTIAN HIEROGLYPH X008

Y. Writings, games, music

133D8 𐦨 EGYPTIAN HIEROGLYPH Y001
 133D9 𐦩 EGYPTIAN HIEROGLYPH Y001A
 133DA 𐦪 EGYPTIAN HIEROGLYPH Y002
 133DB 𐦫 EGYPTIAN HIEROGLYPH Y003
 133DC 𐦬 EGYPTIAN HIEROGLYPH Y004
 133DD 𐦭 EGYPTIAN HIEROGLYPH Y005
 133DE 𐦮 EGYPTIAN HIEROGLYPH Y006
 133DF 𐦯 EGYPTIAN HIEROGLYPH Y007
 133E0 𐦰 EGYPTIAN HIEROGLYPH Y008

Z. Strokes, signs derived from Hieratic, geometrical figures

133E1 𐦱 EGYPTIAN HIEROGLYPH Z001
 = unity
 → 133F2 𐦱, egyptian hieroglyph z015
 133E2 𐦲 EGYPTIAN HIEROGLYPH Z002
 = plurality
 → 133F4 𐦲, egyptian hieroglyph z015b
 133E3 𐦳 EGYPTIAN HIEROGLYPH Z003
 = plurality
 → 133F4 𐦲, egyptian hieroglyph z015b
 133E4 𐦴 EGYPTIAN HIEROGLYPH Z003A

133E5 𐦵 EGYPTIAN HIEROGLYPH Z004
 = duality
 = y
 → 131CD 𐦵, egyptian hieroglyph m017a
 133E6 𐦶 EGYPTIAN HIEROGLYPH Z004A
 = duality
 → 133F3 𐦶, egyptian hieroglyph z015a
 133E7 𐦷 EGYPTIAN HIEROGLYPH Z005
 133E8 𐦸 EGYPTIAN HIEROGLYPH Z005A
 133E9 𐦹 EGYPTIAN HIEROGLYPH Z006
 133EA 𐦺 EGYPTIAN HIEROGLYPH Z007
 133EB 𐦻 EGYPTIAN HIEROGLYPH Z008
 133EC 𐦼 EGYPTIAN HIEROGLYPH Z009
 133ED 𐦽 EGYPTIAN HIEROGLYPH Z010
 133EE 𐦾 EGYPTIAN HIEROGLYPH Z011
 133EF 𐦿 EGYPTIAN HIEROGLYPH Z012
 133F0 𐧀 EGYPTIAN HIEROGLYPH Z013
 133F1 𐧁 EGYPTIAN HIEROGLYPH Z014
 133F2 𐧂 EGYPTIAN HIEROGLYPH Z015
 = 1
 → 133E1 𐦱, egyptian hieroglyph z001
 133F3 𐧃 EGYPTIAN HIEROGLYPH Z015A
 = 2
 → 133E6 𐦶, egyptian hieroglyph z004a
 133F4 𐧄 EGYPTIAN HIEROGLYPH Z015B
 = 3
 → 133E2 𐦲, egyptian hieroglyph z002
 → 133E3 𐦳, egyptian hieroglyph z003
 133F5 𐧅 EGYPTIAN HIEROGLYPH Z015C
 = 4
 133F6 𐧆 EGYPTIAN HIEROGLYPH Z015D
 = 5
 133F7 𐧇 EGYPTIAN HIEROGLYPH Z015E
 = 6
 133F8 𐧈 EGYPTIAN HIEROGLYPH Z015F
 = 7
 133F9 𐧉 EGYPTIAN HIEROGLYPH Z015G
 = 8
 133FA 𐧊 EGYPTIAN HIEROGLYPH Z015H
 = 9
 133FB 𐧋 EGYPTIAN HIEROGLYPH Z015I
 = 5
 133FC 𐧌 EGYPTIAN HIEROGLYPH Z016
 = 1 in dates
 133FD 𐧍 EGYPTIAN HIEROGLYPH Z016A
 = 2 in dates
 133FE 𐧎 EGYPTIAN HIEROGLYPH Z016B
 = 3 in dates
 133FF 𐧏 EGYPTIAN HIEROGLYPH Z016C
 = 4 in dates
 13400 𐧐 EGYPTIAN HIEROGLYPH Z016D
 = 5 in dates
 13401 𐧑 EGYPTIAN HIEROGLYPH Z016E
 = 6 in dates
 13402 𐧒 EGYPTIAN HIEROGLYPH Z016F
 = 7 in dates
 13403 𐧓 EGYPTIAN HIEROGLYPH Z016G
 = 8 in dates
 13404 𐧔 EGYPTIAN HIEROGLYPH Z016H
 = 9 in dates

Aa. Unclassified

- 13405 ● EGYPTIAN HIEROGLYPH AA001
 = kh
 → 0624 ﺥ arabic letter khah
 → 1E2B ħ latin small letter h with breve below
- 13406 ◉ EGYPTIAN HIEROGLYPH AA002
- 13407 ◊ EGYPTIAN HIEROGLYPH AA003
- 13408 ○ EGYPTIAN HIEROGLYPH AA004
- 13409 ⌘ EGYPTIAN HIEROGLYPH AA005
- 1340A ⌘ EGYPTIAN HIEROGLYPH AA006
- 1340B ⌘ EGYPTIAN HIEROGLYPH AA007
- 1340C ⌘ EGYPTIAN HIEROGLYPH AA007A
- 1340D ⌘ EGYPTIAN HIEROGLYPH AA007B
- 1340E ⌘ EGYPTIAN HIEROGLYPH AA008
- 1340F ⌘ EGYPTIAN HIEROGLYPH AA009
- 13410 ⌘ EGYPTIAN HIEROGLYPH AA010
- 13411 ⌘ EGYPTIAN HIEROGLYPH AA011
- 13412 ⌘ EGYPTIAN HIEROGLYPH AA012
- 13413 ⌘ EGYPTIAN HIEROGLYPH AA013
- 13414 ⌘ EGYPTIAN HIEROGLYPH AA014
- 13415 ⌘ EGYPTIAN HIEROGLYPH AA015
- 13416 ⌘ EGYPTIAN HIEROGLYPH AA016
- 13417 ⌘ EGYPTIAN HIEROGLYPH AA017
- 13418 ⌘ EGYPTIAN HIEROGLYPH AA018
- 13419 ⌘ EGYPTIAN HIEROGLYPH AA019
- 1341A ⌘ EGYPTIAN HIEROGLYPH AA020
- 1341B ⌘ EGYPTIAN HIEROGLYPH AA021
- 1341C ⌘ EGYPTIAN HIEROGLYPH AA022
- 1341D ⌘ EGYPTIAN HIEROGLYPH AA023
- 1341E ⌘ EGYPTIAN HIEROGLYPH AA024
- 1341F ⌘ EGYPTIAN HIEROGLYPH AA025
- 13420 ⌘ EGYPTIAN HIEROGLYPH AA026
- 13421 ⌘ EGYPTIAN HIEROGLYPH AA027
- 13422 ⌘ EGYPTIAN HIEROGLYPH AA028
- 13423 ⌘ EGYPTIAN HIEROGLYPH AA029
- 13424 ⌘ EGYPTIAN HIEROGLYPH AA030
- 13425 ⌘ EGYPTIAN HIEROGLYPH AA031
- 13426 ⌘ EGYPTIAN HIEROGLYPH AA032

UniKemet database of Egyptian Hieroglyphs for UCS encoding													
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd	C2005
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	0	C2005
A001	544:A1	17:A1								423:A1		1	A1
A002	544:A2	17:A2								423:A2		1	A2
A003	544:A3	17:A3								423:A3		1	A3
A004	544:A4	17:A4								423:A4		1	A4
A005	544:A5	17:A5								423:A5		1	A5
A005A					2:A5*							1	A5A
A006	544:A6	17:A6								423:A6		1	A6
A006A					2:A6*							1	A6N
A006B						8-4:5:650						1	A6M
A007	544:A7	17:A7								423:A7		1	A7
A008	544:A8	17:A8								423:A8		1	A8
A009	544:A9	17:A9								423:A9		1	A9
A010	544:A10	17:A10								423:A10		1	A10
A011	544:A11	17:A11								423:A11		1	A11
A012	544:A12	17:A12								423:A12		1	A12
A013	544:A13	17:A13								423:A13		1	A13
A014	544:A14	17:A14								424:A14		1	A14
A014A	544:A14*			245:A14*	2:A14*					424:A14a		1	A14A
A015	544:A15	17:A15								424:A15		1	A15
A016	544:A16	17:A16								424:A16		1	A16
A017	544:A17	17:A17								424:A17		1	A17
A017A	544:A17*				2:A17*					424:A17a		1	A17A
A018	544:A18	17:A18								424:A18		1	A18
A019	544:A19	17:A19								424:A19		1	A19
A020	544:A20	17:A20								424:A20		1	A20
A021	544:A21	17:A21								424:A21		1	A21
A022	544:A22	17:A22								424:A22		1	A22
A023	544:A23	17:A23								424:A23		1	A23
A024	544:A24	17:A24								424:A24		1	A24
A025	544:A25	17:A25								424:A25		1	A25
A026	544:A26	17:A26								424:A26		1	A26

Source database for review 2007-04-10 1

UniKemet database of Egyptian Hieroglyphs for UCS encoding													
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd	C2005
A027	544:A27	17:A27								424:A27		1	A27
A028	544:A28	17:A28								424:A28		1	A28
A029	544:A29	17:A29								424:A29		1	A29
A030	544:A30	17:A30								424:A30		1	A30
A031	544:A31	17:A31								424:A31		1	A31
A032	544:A32	17:A32								424:A32		1	A32
A032A		17:A32*										1	A32A
A033	544:A33	17:A33								424:A33		1	A33
A034	544:A34	17:A34								424:A34		1	A34
A035	544:A35	17:A35								424:A35		1	A35
A036	544:A36	17:A36								424:A36		1	A36
A037	544:A37	17:A37								424:A37		1	A37
A038	544:A38	17:A38								424:A38		1	A38
A039	544:A39	17:A39								424:A39		1	A39
A040	544:A40	17:A40								425:A40		1	A40
A040A					2:C22							1	A40A
A041	544:A41	17:A41								425:A41		1	A41
A042	544:A42	18:142								425:A42		1	A42
A042A				245:A42*	2:A42*							1	
A043	544:A43	18:A43								425:A43		1	A43
A043A					2:C21							1	A43D
A044	544:A44	18:A44								425:A44		1	A44
A045	544:A45	18:A45								425:A45		1	A45
A045A						GITB ref						1	A45B
A046	544:A46	18:A46								425:A46		1	A46
A047	544:A47	18:A47								425:A47		1	A47
A048	544:A48	18:A48								425:A48		1	A48
A049	544:A49	18:A49								425:A49		1	A49
A050	544:A50	18:A50								425:A50		1	A50
A051	544:A51	18:A51								425:A51		1	A51
A052	544:A52	18:A52								425:A52		1	A52
A053	544:A53	18:A53								425:A53		1	A53

Source database for review 2007-04-10 2

UniKemet database of Egyptian Hieroglyphs for UCS encoding													
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd	C2005
A054	544:A54	18:A54								425:A54		1	A54
A055	544:A55	18:A55								425:A55		1	A55
A056		18:A56										1	A56
A057		18:A57										1	A57
A058		18:A58										1	A58
A059			95:A59		2:A59					424:A59		1	A59
A060			95:A60		2:A60							1	A60
A061				245:A61	2:A61							1	A61
A062				245:A62	2:A62							1	A62
A063				245:A63	2:A63							1	A63
A064					2:A64							1	A64
A065					2:A65							1	A469
A066					2:A66							1	A239
A067					2:A67							1	A282
A068					2:A68							1	A199A
A069						GITB ref				423:A68		1	A68
A070						8-1:626:810						1	A73
B001	544:B1	19:B1								425:B1		1	B1
B002	544:B2	19:B2								425:B2		1	B2
B003	544:B3	19:B3								425:B3		1	B3
B004	544:B4	19:B4								425:B4		1	B4
B005	544:B5	19:B5								425:B5		1	B5
B005A							8-4:13:500					1	B106
B006	544:B6	19:B6								425:B6		1	B6
B007	544:B7		95:B7		2:B7					425:B7		1	B7
B008				245:B8	2:B8							1	B8
B009							8-1:690:370					1	B47
C001	544:C1	19:C1								425:C1		1	C1
C002	544:C2	19:C2								425:C2		1	C2
C002A					2:C2*							1	C2A
C002B					2:C2**							1	
C002C					2:C2***							1	

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UniKemet database of Egyptian Hieroglyphs for UCS encoding													
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd	C2005
C003	544:C3	19:C3								425:C3		1	C3
C004	544:C4	19:C4								425:C4		1	C4
C005	544:C5	19:C5								425:C5		1	C5
C006	544:C6	19:C6								426:C6		1	C6
C007	544:C7	19:C7								426:C7		1	C7
C008	544:C8	19:C8								426:C8		1	C8
C009	544:C9	19:C9								426:C9		1	C9
C010	544:C10	19:C10								426:C10		1	C10
C010A		19:C10*								426:C10a		1	C10A
C011	544:C11	19:C11					63:AAG655			426:C11		1	C11
C012	544:C12			245:C12	2:C12					426:C12		1	C12
C013				245:C13	2:C13							1	
C014				245:C14	2:C14							1	C14
C015				245:C15	2:C15							1	
C016				245:C16	2:C16							1	C16
C017	544:C17			245:C17	2:C17					426:C17		1	C17
C018	544:C18			246:C18	2:C18					426:C18		1	C18
C019	544:C19			246:C19	2:C19					426:C19		1	C19
C020	544:C20			246:C20	2:C20					426:C20		1	C20
C021						8-1:751:278						1	C33
C022						8-1:727:370						1	C49B
C023						GITB ref						1	C165
C024						8-1:753:130						1	C185B
D001	544:D1	20:D1								426:D1		1	D1
D002	544:D2	20:D2								426:D2		1	D2
D003	544:D3	20:D3								426:D3		1	D3
D004	544:D4	20:D4								426:D4		1	D4
D005	544:D5	20:D5								426:D5		1	D5
D006	544:D6	20:D6								426:D6		1	D6
D007	544:D7	20:D7								426:D7		1	D7
D008	544:D8	20:D8								426:D8		1	D8
D008A		20:D8*										1	D8A

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UniKemet database of Egyptian Hieroglyphs for UCS encoding												
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd C2005
D009	544:D9	20:D9								426:D9		1 D9
D010	544:D10	20:D10								426:D10		1 D10
D011	544:D11	20:D11								426:D11		1 D11
D012	544:D12	20:D12								426:D12		1 D12
D013	544:D13	20:D13								426:D13		1 D13
D014	544:D14	20:D14								426:D14		1 D14
D015	544:D15	20:D15								426:D15		1 D15
D016	544:D16	20:D16								426:D16		1 D16
D017	544:D17	20:D17								426:D17		1 D17
D018	544:D18	20:D18								426:D18		1 D18
D019	544:D19	20:D19								426:D19		1 D19
D020	544:D20	20:D20								426:D20		1 D20
D021	544:D21	20:D21								427:D21		1 D21
D022	544:D22	20:D22								427:D22		1 D22
D023	544:D23	20:D23								427:D23		1 D23
D024	544:D24	20:D24								427:D24		1 D24
D025	544:D25	20:D25								427:D25		1 D25
D026	544:D26	20:D26								427:D26		1 D26
D027	544:D27	20:D27								427:D27		1 D27
D027A	544:D27*	20:D27*								427:D27a		1 D27A
D028	544:D28	20:D28								427:D28		1 D28
D029	544:D29	20:D29								427:D29		1 D29
D030	544:D30	20:D30								427:D30		1 D30
D031	544:D31	20:D31								427:D31		1 D31
D031A					3:D31*							1 D31A
D032	544:D32	20:D32								427:D32		1 D32
D033	544:D33	20:D33								427:D33		1 D33
D034	544:D34	20:D34								427:D34		1 D34
D034A	544:D34*	20:D34*								427:D34a		1 D34A
D035	544:D35	20:D35								427:D35		1 D35
D036	544:D36	20:D36								427:D36		1 D36
D037	544:D37	20:D37								427:D37		1 D37

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UniKemet database of Egyptian Hieroglyphs for UCS encoding												
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd C2005
D038	544:D38	20:D38								427:D38		1 D38
D039	544:D39	20:D39								427:D39		1 D39
D040	544:D40	20:D40								427:D40		1 D40
D041	544:D41	20:D41								427:D41		1 D41
D042	544:D42	20:D42								427:D42		1 D42
D043	544:D43	20:D43								427:D43		1 D43
D044	544:D44	20:D44								427:D44		1 D44
D045	544:D45	20:D45								427:D45		1 D45
D046	544:D46	20:D46								427:D46		1 D46
D046A	544:D46*	20:D46*								427:D46a		1 D46A
D047		20:D47								427:D47		1 D47
D048	544:D48	21:D48								427:D48		1 D48
D048A					3:D48*							1 D48A
D049	544:D49	21:D49								427:D49		1 D49
D050	544:D50	21:D50					63:AAe650	59:AAe650		427:D50		1 D50
D050A	199:20000						63:AAe651	59:AAe651				1
D050B							63:AAe652	59:AAe652				1
D050C							63:AAe653	59:AAe653				1
D050D	191:50000							59:AAe653B		97:50000		1
D050E								59:AAe653C				1
D050F								59:AAe653D				1
D050G								59:AAe653E				1
D050H								59:AAe653F				1
D050I	191:50000							59:AAe653B		97:50000		1
D051	544:D51	21:D51								428:D51		1 D51
D052	544:D52	21:D52								428:D52		1 D52
D052A				246:D52*	3:D52*							1 S125
D053	544:D53	21:D53								428:D53		1 D53
D054	544:D54	21:D54								428:D54		1 D54
D054A			95:Ff3									1
D055	544:D55	21:D55								428:D55		1 D55
D056	544:D56	21:D56								428:D56		1 D56

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UniKemet database of Egyptian Hieroglyphs for UCS encoding													
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd	C2005
D057	544:D57	21:D57								428:D57		1	D57
D058	544:D58	21:D58								428:D58		1	D58
D059	544:D59	21:D59								428:D59		1	D59
D060	544:D60	21:D60								428:D60		1	D60
D061	544:D61	21:D61								428:D61		1	D61
D062	544:D62	21:D63								428:D62		1	D62
D063	544:D63	21:D63								428:D63		1	D63
D064					3:D64							1	D271
D065					3:D65							1	D132
D066					3:D66							1	D66
D067	199:1						66:DDc695		63:DDc695			1	
D067A	199:2							62:DDc696	63:DDc696			1	
D067B	199:3						66:DDc697b	62:DDc697	63:DDc697			1	
D067C										102:4		1	
D067D							66:DDc699			102:5		1	
D067E	192:6						66:DDc700			102:6		1	
D067F	198:7						66:DDc701					1	
D067G	198:8						66:DDc702			102:8		1	
D067H										102:9		1	
E001	544:E1	22:E1								428:E1		1	E1
E002	544:E2	22:E2								428:E2		1	E2
E003	544:E3	22:E3								428:E3		1	E3
E004	544:E4	22:E4								428:E4		1	E4
E005	544:E5	22:E5								428:E5		1	E5
E006	544:E6	22:E6								428:E6		1	E6
E007	544:E7	22:E7								428:E7		1	E7
E008	544:E8	22:E8								428:E8		1	E8
E008A	544:E8*			246:E8*	3:E8*					428:E8a		1	E8A
E009	544:E9	22:E9								428:E9		1	E9
E009A					3:E9*							1	E100
E010	544:E10	22:E10								428:E10		1	E10
E011	544:E11	22:E11								428:E11		1	E11

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UniKemet database of Egyptian Hieroglyphs for UCS encoding													
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd	C2005
E012	544:E12	22:E12								428:E12		1	E12
E013	544:E13	22:E13								428:E13		1	E13
E014	544:E14	22:E14								429:E14		1	E14
E015	544:E15	22:E15								429:E15		1	E15
E016	544:E16	22:E16								429:E16		1	E16
E016A					3:E16*							1	E16C
E017	544:E17	22:E17								429:E17		1	E17
E017A						8-2:134:610						1	E141
E018	544:E18	22:E18								429:E18		1	E18
E019	544:E19	22:E19								429:E19		1	E19
E020	544:E20	22:E20								429:E20		1	E20
E020A		22:E20*										1	E20B
E021	544:E21	22:E21								429:E21		1	E21
E022	544:E22	22:E22								429:E22		1	E22
E023	544:E23	22:E23								429:E23		1	E23
E024	544:E24	22:E24								429:E24		1	E24
E025	544:E25	22:E25								429:E25		1	E25
E026	544:E26	22:E26								429:E26		1	E26
E027	544:E27	22:E27								429:E27		1	E27
E028	544:E28	22:E28								429:E28		1	E28
E028A		22:E28*										1	E28A
E029	544:E29	22:E29								429:E29		1	E29
E030	544:E30	22:E30								429:E30		1	E30
E031	544:E31	22:E31								429:E31		1	E31
E032	544:E32	22:E32								429:E32		1	E32
E033	544:E33	22:E33								429:E33		1	E33
E034	544:E34	22:E34								429:E34		1	E34
E034A		22:E34*										1	
E035		22:E35			7:NnU15							1	E34B
E036					3:E36							1	E35
E037					3:E37							1	E45
E038					3:E38							1	E92

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UniKemet database of Egyptian Hieroglyphs for UCS encoding													
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd	C2005
F001	544:F1	23:F1								429:F1		1	F1
F001A				246:F1*	3:F1*					429:F63		1	F1B
F002	544:F2	23:F2								429:F2		1	F2
F003	544:F3	23:F3								429:F3		1	F3
F004	544:F4	23:F4								429:F4		1	F4
F005	544:F5	23:F5								429:F5		1	F5
F006	544:F6	23:F6								429:F6		1	F6
F007	544:F7	23:F7								429:F7		1	F7
F008	544:F8	23:F8								429:F8		1	F8
F009	544:F9	23:F9								429:F9		1	F9
F010	544:F10	23:F10								429:F10		1	F10
F011	544:F11	23:F11								429:F11		1	F11
F012	544:F12	23:F12								429:F12		1	F12
F013	544:F13	23:F13								429:F13		1	F13
F013A		23:F13*										1	F13B
F014	544:F14	23:F14								430:F14		1	F14
F015	544:F15	23:F15								430:F15		1	F15
F016	544:F16	23:F16								430:F16		1	F16
F017	544:F17	23:F17								430:F17		1	F17
F018	544:F18	23:F18								430:F18		1	F18
F019	544:F19	23:F19								430:F19		1	F19
F020	544:F20	23:F20								430:F20		1	F20
F021	544:F21	23:F21								430:F21		1	F21
F021A			95:Ff4									1	
F022	544:F22	23:F22								430:F22		1	F22
F023	544:F23	23:F23								430:F23		1	F23
F024	544:F24	23:F24								430:F24		1	F24
F025	544:F25	23:F25								430:F25		1	F25
F026	544:F26	23:F26								430:F26		1	F26
F027	544:F27	23:F27								430:F27		1	F27
F028	544:F28	23:F28								430:F28		1	F28
F029	544:F29	23:F29								430:F29		1	F29

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UniKemet database of Egyptian Hieroglyphs for UCS encoding													
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd	C2005
F030	544:F30	23:F30								430:F30		1	F30
F031	544:F31	23:F31								430:F31		1	F31
F031A					3:F31							1	F31A
F032	544:F32	23:F32								430:F32		1	F32
F033	544:F33	23:F33								430:F33		1	F33
F034	544:F34	23:F34								430:F34		1	F34
F035	544:F35	23:F35								430:F35		1	F35
F036	544:F36	23:F36								430:F36		1	F36
F037	544:F37	23:F37								430:F37		1	F37
F037A					6:Ff9					430:F37b		1	F37B
F038	544:F38	23:F38								430:F38		1	F38
F038A		23:F38*										1	F38C
F039	544:F39	23:F39								430:F39		1	F39
F040	544:F40	23:F40								430:F40		1	F40
F041	544:F41	23:F41								430:F41		1	F41
F042	544:F42	23:F42								430:F42		1	F42
F043	544:F43	23:F43								430:F43		1	F43
F044	544:F44	23:F44								430:F44		1	F44
F045	544:F45	23:F45								430:F45		1	F45
F045A		38:U31(v)										1	U31V
F046	544:F46	23:F46								430:F46		1	F46
F046A	466:(F46)											1	F46A
F047	544:F47	24:F47								430:F47		1	F47
F047A	466:(F47)											1	F47A
F048	544:F48	24:F48								430:F48		1	F48
F049	544:F49	24:F49								430:F49		1	F49
F050	544:F50	24:F50								430:F50		1	F50
F051	544:F51	24:F51								431:F51		1	F51
F051A		24:F51*										1	F51G
F051B		24:F51**										1	F51GV
F051C	467:F51n4									431:F51(a)		1	F51A
F052	544:F52	24:F52								431:F52		1	F52

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UniKemet database of Egyptian Hieroglyphs for UCS encoding

Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd C2005
F053						8-1:797:520						1 F59
G001	545:G1	25:G1								431:G1		1 G1
G002	545:G2	25:G2								431:G2		1 G2
G003	545:G3	25:G3								431:G3		1 G3
G004	545:G4	25:G4								431:G4		1 G4
G005	545:G5	25:G5								431:G5		1 G5
G006	545:G6	25:G6								431:G6		1 G6
G006A		25:G6*										1 G6A
G007	545:G7	25:G7								431:G7		1 G7
G007A	545:G7*			246:G7*	3:G7*					431:G7a		1 G7A
G007B	545:G7**			246:G7**	3:G7**					431:G7b		1 G7B
G008	545:G8	25:G8								431:G8		1 G8
G009	545:G9	25:G9								431:G9		1 G9
G010	545:G10	25:G10								431:G10		1 G10
G011	545:G11	25:G11								431:G11		1 G11
G011A				246:G11*	3:G11*							1 G11A
G012	545:G12	25:G12								431:G12		1 G12
G013	545:G13	25:G13								431:G13		1 G13
G014	545:G14	25:G14								431:G14		1 G14
G015	545:G15	25:G15								431:G15		1 G15
G016	545:G16	25:G16								431:G16		1 G16
G017	545:G17	25:G17								431:G17		1 G17
G018	545:G18	25:G18								431:G18		1 G18
G019	545:G19	25:G19								431:G19		1 G19
G020	545:G20	25:G20								431:G20		1 G20
G020A					3:G20*							1 G90
G021	545:G21	25:G21								431:G21		1 G21
G022	545:G22	25:G22								431:G22		1 G22
G023	545:G23	25:G23								431:G23		1 G23
G024	545:G24	25:G24								431:G24		1 G24
G025	545:G25	25:G25								431:G25		1 G25
G026	545:G26	25:G26								432:G26		1 G26

UniKemet database of Egyptian Hieroglyphs for UCS encoding

Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd C2005
G026A	545:G26*				3:G26*					432:G26a		1 G26A
G027	545:G27	25:G27								432:G27		1 G27
G028	545:G28	25:G28								432:G28		1 G28
G029	545:G29	25:G29								432:G29		1 G29
G030	545:G30	25:G30								432:G30		1 G30
G031	545:G31	25:G31								432:G31		1 G31
G032	545:G32	25:G32								432:G32		1 G32
G033	545:G33	25:G33								432:G33		1 G33
G034	545:G34	25:G34								432:G34		1 G34
G035	545:G35	25:G35								432:G35		1 G35
G036	545:G36	25:G36								432:G36		1 G36
G036A		25:G36*										1 G36A
G037	545:G37	25:G37								432:G37		1 G37
G037A		25:G37*										1 G37A
G038	545:G38	25:G38								432:G38		1 G38
G039	545:G39	25:G39								432:G39		1 G39
G040	545:G40	25:G40								432:G40		1 G40
G041	545:G41	26:G41								432:G41		1 G41
G042	545:G42	26:G42								432:G42		1 G42
G043	545:G43	26:G43								432:G43		1 G43
G043A		26:G43*										1
G044	545:G44	26:G44								432:G44		1 G44
G045	545:G45	26:G45								432:G45		1 G45
G045A					3:G45*							1 G45A
G046	545:G46	26:G46								432:G46		1 G46
G047	545:G47	26:G47								432:G47		1 G47
G048	545:G48	26:G48								432:G48		1 G48
G049	545:G49	26:G49								432:G49		1 G49
G050	545:G50	26:G50								432:G50		1 G50
G051	545:G51	26:G51								432:G51		1 G51
G052	545:G52	26:G52								432:G52		1 G52
G053	545:G53	26:G53								432:G53		1 G53

UniKemet database of Egyptian Hieroglyphs for UCS encoding												
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd C2005
G054	545:G54	26:G54								432:G54		1 G54
H001	545:H1	27:H1								433:H1		1 H1
H002	545:H2	27:H2								433:H2		1 H2
H003	545:H3	27:H3								433:H3		1 H3
H004	545:H4	27:H4								433:H4		1 H4
H005	545:H5	27:H5								433:H5		1 H5
H006	545:H6	27:H6								433:H6		1 H6
H006A	545:H6*		95:Ff5		3:H6*					433:H6a		1 H6A
H007	545:H7	27:H7								433:H7		1 H7
H008	545:H8	27:H8								433:H8		1 H8
I001	545:I1	27:I1								433:I1		1 I1
I002	545:I2	27:I2								433:I2		1 I2
I003	545:I3	27:I3								433:I3		1 I3
I004	545:I4	27:I4								433:I4		1 I4
I005	545:I5	27:I5								433:I5		1 I5
I005A	545:I5A		95:I5*		4:I5*					433:I5a		1 I5A
I006	545:I6	27:I6								433:I6		1 I6
I007	545:I7	27:I7								433:I7		1 I7
I008	545:I8	27:I8					63:AAf654	59:AAf654		433:I8		1 I8
I009	545:I9	27:I9								433:I9		1 I9
I009A					4:I9*							1 I24
I010	545:I10	27:I10								433:I10		1 I10
I010A					4:I10*							1 I31
I011	545:I11	27:I11								433:I11		1 I11
I011A		27:I11*										1 I11A
I012	545:I12	27:I12								433:I12		1 I12
I013	545:I13	27:I13								433:I13		1 I13
I014	545:I14	27:I14								433:I14		1 I14
I015	545:I15	27:I15								433:I15		1 I15
K001	545:K1	28:K1								433:K1		1 K1
K002	545:K2	28:K2								433:K2		1 K2
K003	545:K3	28:K3								433:K3		1 K3

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UniKemet database of Egyptian Hieroglyphs for UCS encoding												
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd C2005
K004	545:K4	28:K4								434:K4		1 K4
K005	545:K5	28:K5								434:K5		1 K5
K006	545:K6	28:K6								434:K6		1 K6
K007	545:K7	28:K7								434:K7		1 K7
K008					4:K8							1 K13
L001	545:L1	28:L1								434:L1		1 L1
L002	545:L2	28:L2								434:L2		1 L2
L002A		28:L2*										1 L2A
L003	477:L3	28:L3										1 L3U
L004	545:L4	28:L4								434:L4		1 L4
L005	545:L5	28:L5								434:L5		1 L5
L006	545:L6	28:L6								434:L6		1 L6
L006A		28:L6*										1 L6A
L007	545:L7	28:L7								434:L7		1 L7
L008						8-1:221:400						1 L35
M001	545:M1	29:M1								434:M1		1 M1
M001A		29:M1*								434:M1a		1 M1A
M001B					4:M1**							1 M1E
M002	545:M2	29:M2								434:M2		1 M2
M003	545:M3	29:M3								434:M3		1 M3
M003A					4:M3*							1 M3G
M004	545:M4	29:M4								434:M4		1 M4
M005	545:M5	29:M5								434:M5		1 M5
M006	545:M6	29:M6								434:M6		1 M6
M007	545:M7	29:M7								434:M7		1 M7
M008	545:M8	29:M8								434:M8		1 M8
M009	545:M9	29:M9								434:M9		1 M9
M010	545:M10	29:M10								434:M10		1 M10
M010A		29:M10*										1 M10A
M011	545:M11	29:M11								434:M11		1 M11
M012	545:M12	29:M12					62:AAAd641	58:AAAd641		434:M12		1 M12
M012A	191:2000						62:AAAd642	58:AAAd642	61:AAAd641	97:2000		1

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UniKemet database of Egyptian Hieroglyphs for UCS encoding												
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd C2005
M012B							62:AAAd643	58:AAAd643	61:AAAd642	97:3000		1
M012C							62:AAAd644	58:AAAd644				1
M012D							62:AAAd645	58:AAAd645				1
M012E							62:AAAd646	58:AAAd646				1
M012F							62:AAAd647	58:AAAd647				1
M012G							62:AAAd648	58:AAAd648				1
M012H							62:AAAd649	58:AAAd649				1
M013	545:M13	29:M13								434:M13		1 M13
M014	545:M14	29:M14								434:M14		1 M14
M015	545:M15	29:M15								435:M15		1 M15
M015A							8-1:750:190					1 M139
M016	545:M16	29:M16								435:M16		1 M16
M016A				246:M16*	4:M16*							1 M139
M017	545:M17	29:M17								435:M17		1 M17
M017A	481:y									435:y		1 M17A
M018	545:M18	29:M18								435:M18		1 M18
M019	545:M19	29:M19								435:M19		1 M19
M020	545:M20	29:M20								435:M20		1 M20
M021	545:M21	29:M21								435:M21		1 M21
M022	545:M22	29:M22								435:M22		1 M22
M022A	482:(M22)									435:nn		1 M22A
M023	545:M23	29:M23								435:M23		1 M23
M024	545:M24	29:M24								435:M24		1 M24
M024A				246:M24*	4:M24*							1 M24B
M025	545:M25	29:M25								435:M25		1 M25
M026	545:M26	29:M26								435:M26		1 M26
M027	545:M27	29:M27								435:M27		1 M27
M028	545:M28	29:M28								435:M28		1 M28
M028A				246:M28*	4:M28*							1 M140
M029	545:M29	29:M29								435:M29		1 M29
M030	545:M30	29:M30								435:M30		1 M30
M031	545:M31	29:M31								435:M31		1 M31

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UniKemet database of Egyptian Hieroglyphs for UCS encoding												
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd C2005
M031A				246:M31*	4:M31*							1 M31D
M032	545:M32	29:M32								435:M32		1 M32
M033	545:M33	29:M33								435:M33		1 M33
M033A		29:M33*								435:M33(a)		1 M33A
M033B	483:M33(b)											1
M034	545:M34	29:M34								435:M34		1 M34
M035	545:M35	29:M35								435:M35		1 M35
M036	545:M36	29:M36								435:M36		1 M36
M037	545:M37	29:M37								435:M37		1 M37
M038	545:M38	29:M38								435:M38		1 M38
M039	545:M39	29:M39								435:M39		1 M39
M040	545:M40	29:M40								435:M40		1 M40
M040A		30:M40*										1 M40D
M041	545:M41	30:M41								435:M41		1 M41
M042	545:M42	30:M42								435:M42		1 M42
M043	545:M43	30:M43								435:M43		1 M43
M044	545:M44	30:M44								435:M044		1 M44
N001	545:N1	31:N1								436:N1		1 N1
N002	545:N2	31:N2								436:N2		1 N2
N003	545:N3	31:N3								436:N3		1 N3
N004	545:N4	31:N4								436:N4		1 N4
N005	545:N5	31:N5								436:N5		1 N5
N006	545:N6	31:N6								436:N6		1 N6
N007	545:N7	31:N7								436:N7		1 N7
N008	545:N8	31:N8								436:N8		1 N8
N009	545:N9	31:N9								436:N9		1 N9
N010	545:N10	31:N10								436:N10		1 N10
N011	545:N11	31:N11								436:N11		1 N11
N012	545:N12	31:N12								436:N12		1 N12
N013	545:N13	31:N13								436:N13		1 N13
N014	545:N14	31:N14								436:N14		1 N14
N015	545:N15	31:N15								436:N15		1 N15

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UniKemet database of Egyptian Hieroglyphs for UCS encoding													
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd	C2005
N016	545:N16	31:N16								436:N16		1	N16
N017	545:N17	31:N17								436:N17		1	N17
N018	545:N18	31:N18								436:N18		1	N18
N018A					4:N18*							1	N102
N018B					4:N18**							1	N18B
N019	545:N19	31:N19								436:N19		1	N19
N020	545:N20	31:N20								436:N20		1	N20
N021	545:N21	31:N21								436:N21		1	N21
N022	545:N22	31:N22								436:N22		1	N22
N023	545:N23	31:N23								436:N23		1	N23
N024	545:N24	31:N24								436:N24		1	N24
N025	545:N25	31:N25								436:N25		1	N25
N025A		31:N25*										1	N25A
N026	545:N26	31:N26								437:N26		1	N26
N027	545:N27	31:N27								437:N27		1	N27
N028	545:N28	31:N28								437:N28		1	N28
N029	545:N29	31:N29								437:N29		1	N29
N030	545:N30	31:N30								437:N30		1	N30
N031	545:N31	31:N31								437:N31		1	N31
N032	554:N32	31:N32								437:N32		1	N32
N033	545:N33	31:N33								437:N33		1	N33
N033A	547:(N33)	31:N33*								437:33a		1	N33A
N034	545:N34	31:N34								437:N34		1	N34
N034A				246:N34*	4:N34*							1	
N035	545:N35	31:N35								437:N35		1	N35
N035A	545:(N35)									437:N35A		1	N35A
N036	545:N36	31:N36								437:N36		1	N36
N037	545:N37	31:N37								437:N37		1	N37
N037A					4:N37*					437:N37a		1	N37A
N038	545:N38	31:N38								437:N38		1	N38
N039	545:N39	31:N39								437:N39		1	N39
N040	545:N40	31:N40								437:N40		1	N40

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UniKemet database of Egyptian Hieroglyphs for UCS encoding													
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd	C2005
N041	545:N41	31:N41								437:N41		1	N41
N042	545:N42	31:N42								437:N42		1	N42
NL001					7:NnL1							1	NL1
NL002					7:NnL2							1	NL2
NL003					7:NnL3							1	NL3
NL004					7:NnL4							1	NL4
NL005					7:NnL5							1	NL5
NL005A					7:NnL5*							1	NL5A
NL006					7:NnL6							1	NL6
NL007					7:NnL7							1	NL7
NL008					7:NnL8							1	NL8
NL009					7:NnL9							1	NL9
NL010					7:NnL10							1	NL10
NL011					7:NnL11							1	NL11
NL012					7:NnL12							1	NL12
NL013					7:NnL13							1	NL13
NL014					7:NnL14							1	NL14
NL015					7:NnL15							1	NL15
NL016					7:NnL16							1	NL16
NL017					7:NnL17							1	NL17
NL017A					7:NnL17*							1	NL17A
NL018					7:NnL18							1	NL18
NL019					7:NnL19							1	NL19
NL020					7:NnL20							1	NL20
NU001					7:NnU1							1	NU1
NU002					7:NnU2							1	NU2
NU003					7:NnU3							1	NU3
NU004					7:NnU4							1	NU4
NU005					7:NnU5							1	NU5
NU006					7:NnU6							1	NU6
NU007					7:NnU7							1	NU7
NU008					7:NnU8							1	NU8

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UniKemet database of Egyptian Hieroglyphs for UCS encoding													
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd	C2005
NU009					7:NnU9							1	NU9
NU010					7:NnU10							1	NU10
NU010A					7:NnU10*							1	NU10
NU011					7:NnU11							1	NU11
NU011A					7:NnU11*							1	NU11
NU012					7:NnU12							1	NU12
NU013					7:NnU13							1	NU13
NU014					7:NnU14							1	NU14
NU015					7:NnU15							1	NU15
NU016					7:NnU16							1	NU16
NU017					8:NnU17							1	NU17
NU018					8:NnU18							1	NU18
NU018A					8:NnU18*							1	NU18
NU019					8:NnU19							1	NU19
NU020					8:NnU20							1	NU20
NU021					8:NnU21							1	NU21
NU022					8:NnU22							1	NU22
NU022A					8:NnU22*							1	NU22
O001	545:O1	32:O1								437:O1		1	O1
O001A					4:O1*							1	O54
O002	545:O2	32:O2								437:O2		1	O2
O003	545:O3	32:O3								437:O3		1	O3
O004	545:O4	32:O4								437:O4		1	O4
O005	545:O5	32:O5								437:O5		1	O5
O005A		32:O5*										1	O5U
O006	545:O6	32:O6								437:O6		1	O6
O006A	72:serekh									64:serekh		1	
O006B												1	
O006C												1	
O006D												1	
O006E												1	
O006F												1	

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UniKemet database of Egyptian Hieroglyphs for UCS encoding													
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd	C2005
O007	545:O7	32:O7								437:O7		1	O7
O008	545:O8	32:O8								437:O8		1	O8
O009	545:O9	32:O9								437:O9		1	O9
O010	545:O10	32:O10								437:O10		1	O10
O010A					4:O10*							1	O10A
O010B						8-1:755:460						1	O10B
O010C						GITB ref						1	O18F
O011	545:O11	32:O11								437:O11		1	O11
O012	545:O12	32:O12								437:O12		1	O12
O013	545:O13	32:O13								438:O13		1	O13
O014	545:O14	32:O14								438:O14		1	O14
O015	545:O15	32:O15								438:O15		1	O15
O016	545:O16	32:O16								438:O16		1	O16
O017	545:O17	32:O17								438:O17		1	O17
O018	545:O18	32:O18								438:O18		1	O18
O019	545:O19	32:O19								438:O19		1	O19
O019A					4:O19*							1	O19A
O020	545:O20	32:O20								438:O20		1	O20
O020A		32:O20*										1	O20A
O021	545:O21	32:O21								438:O21		1	O21
O022	545:O22	32:O22								438:O22		1	O22
O023	545:O23	32:O23								438:O23		1	O23
O024	545:O24	32:O24								438:O24		1	O24
O024A				246:O24*	4:O24*							1	O24B
O025	545:O25	32:O25								438:O25		1	O25
O025A				246:O25*	4:O25*							1	O190
O026	545:O26	32:O26								438:O26		1	O26
O027	545:O27	32:O27								438:O27		1	O27
O028	545:O28	32:O28								438:O28		1	O28
O029	545:O29	32:O29								438:O29		1	O29
O029A	496:O29(a)	32:O29(a)								438:O29(v)		1	O29V
O030	545:O30	32:O30								438:O30		1	O30

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UniKemet database of Egyptian Hieroglyphs for UCS encoding												
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd C2005
O030A		32:O30*										1 O30A
O031	545:O31	32:O31								438:O31		1 O31
O032	545:O32	32:O32								438:O32		1 O32
O033	545:O33	32:O33								438:O33		1 O33
O033A	72:serekh									64:serekh		1
O034	545:O34	32:O34								438:O34		1 O34
O035	545:O35	32:O35								438:O35		1 O35
O036	545:O36	32:O36								438:O36		1 O36
O036A												1
O036B												1
O036C												1
O036D												1
O037	545:O37	32:O37								438:O37		1 O37
O038	545:O38	32:O38								438:O38		1 O38
O039	545:O39	32:O39								438:O39		1 O39
O040	545:O40	32:O40								438:O40		1 O40
O041	545:O41	32:O41								438:O41		1 O41
O042	545:O42	32:O42								438:O42		1 O42
O043	545:O43	33:O43								438:O43		1 O43
O044	545:O44	33:O44								438:O44		1 O44
O045	545:O45	33:O45								439:O45		1 O45
O046	545:O46	33:O46								439:O46		1 O46
O047	545:O47	33:O47								439:O47		1 O47
O048	545:O48	33:O48								439:O48		1 O48
O049	545:O49	33:O49								439:O49		1 O49
O050	545:O50	33:O50								439:O50		1 O50
O050A					6:Ff8							1
O050B					6:Ff8*							1
O051	545:O51	33:O51								439:O51		1 O51
P001	546:P1	34:P1								439:P1		1 P1
P001A	546:(P1)									439:P1a		1 P1A
P002	546:P2	34:P2								439:P2		1 P2

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UniKemet database of Egyptian Hieroglyphs for UCS encoding												
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd C2005
P003	546:P3	34:P3								439:P3		1 P3
P003A		34:P3*								439:P3a		1 P3B
P004	546:P4	34:P4								439:P4		1 P4
P005	546:P5	34:P5								439:P5		1 P5
P006	546:P6	34:P6								439:P6		1 P6
P007	546:P7	34:P7								439:P7		1 P7
P008	546:P8	34:P8								439:P8		1 P8
P009	546:P9	34:P9								439:P9		1 P9
P010	546:P10	34:P10								439:P10		1 P10
P011	546:P11	34:P11								439:P11		1 P11
Q001	546:Q1	34:Q1								439:Q1		1 Q1
Q002	546:Q2	34:Q2								439:Q2		1 Q2
Q003	546:Q3	34:Q3								439:Q3		1 Q3
Q004	546:Q4	34:Q4								439:Q4		1 Q4
Q005	546:Q5	34:Q5								439:Q5		1 Q5
Q006	546:Q6	34:Q6								439:Q6		1 Q6
Q007	546:Q7	34:Q7								439:Q7		1 Q7
R001	546:R1	35:R1								440:R1		1 R1
R002	546:R2	35:R2								440:R2		1 R2
R002A					5:R2*					440:R36a		1 R2C
R003	546:R3	35:R3								440:R3		1 R3
R003A					5:R3*							1 R3P
R003B					5:R3**							1 R3PA
R004	546:R4	35:R4								440:R4		1 R4
R005	546:R5	35:R5								440:R5		1 R5
R006	546:R6	35:R6								440:R6		1 R6
R007	546:R7	35:R7								440:R7		1 R7
R008	546:R8	35:R8								440:R8		1 R8
R009	546:R9	35:R9								440:R9		1 R9
R010	546:R10	35:R10								440:R10		1 R10
R010A		35:R10*								440:R50		1 R10I
R011	546:R11	35:R11								440:R11		1 R11

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UniKemet database of Egyptian Hieroglyphs for UCS encoding												
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd C2005
R012	546:R12	35:R12								440:R12		1 R12
R013	546:R13	35:R13								440:R13		1 R13
R014	546:R14	35:R14								440:R14		1 R14
R015	546:R15	35:R15								440:R15		1 R15
R016	546:R16	35:R16								440:R16		1 R16
R016A				246:R16*	5:R16*							1 R16B
R017	546:R17	35:R17								440:R17		1 R17
R018	546:R18	35:R18								440:R18		1 R18
R019	546:R19	35:R19								440:R19		1 R19
R020	546:R20	35:R20								440:R20		1 R20
R021	546:R21	35:R21								440:R21		1 R21
R022	546:R22	35:R22								440:R22		1 R22
R023	546:R23	35:R23								440:R23		1 R23
R024	546:R24	35:R24								440:R24		1 R24
R025	546:R25	35:R25								440:R25		1 R25
R026				246:R26	5:R26							1 R26
R027					5:R27							1 R133
R028					5:R28							1 R129
R029					5:R29							1 O196
S001	546:S1	36:S1								440:S1		1 S1
S002	546:S2	36:S2								440:S2		1 S2
S002A					5:S2*							1 S56
S003	546:S3	36:S3								440:S3		1 S3
S004	546:S4	36:S4								440:S4		1 S4
S005	546:S5	36:S5								440:S5		1 S5
S006	546:S6	36:S6								440:S6		1 S6
S006A					5:S6*							1 S48
S007	546:S7	36:S7								441:S7		1 S7
S008	546:S8	36:S8								441:S8		1 S8
S009	546:S9	36:S9								441:S9		1 S9
S010	546:S10	36:S10								441:S10		1 S10
S011	546:S11	36:S11								441:S11		1 S11

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UniKemet database of Egyptian Hieroglyphs for UCS encoding												
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd C2005
S012	546:S12	36:S12								441:S12		1 S12
S013	546:S13	36:S13								441:S13		1 S13
S014	546:S14	36:S14								441:S14		1 S14
S014A	546:S14*				5:S14*					441:S14A		1 S14A
S014B					5:S14**							1 S14D
S015	546:S15	36:S15								441:S15		1 S15
S016	546:S16	36:S16								441:S16		1 S16
S017	546:S17	36:S17								441:S17		1 S17
S017A	546:S17*				5:S17*					441:S17A		1 S17A
S018	546:S18	36:S18								441:S18		1 S18
S019	546:S19	36:S19								441:S19		1 S19
S020	546:S20	36:S20								441:S20		1 S20
S021	546:S21	36:S21								441:S21		1 S21
S022	546:S22	36:S22								441:S22		1 S22
S023	546:S23	36:S23								441:S23		1 S23
S024	546:S24	36:S24								441:S24		1 S24
S025	546:S25	36:S25								441:S25		1 S25
S026	546:S26	36:S26								441:S26		1 S26
S027	546:S27	36:S27								441:S27		1 S27
S028	546:S28	36:S28								441:S28		1 S28
S029	546:S29	36:S29								441:S29		1 S29
S030	546:S30	36:S30								441:S30		1 S30
S031	546:S31	36:S31								441:S31		1 S31
S032	546:S32	36:S32								441:S32		1 S32
S033	546:S33	36:S33								441:S33		1 S33
S034	546:S34	36:S34								441:S34		1 S34
S035	546:S35	36:S35								442:S35		1 S35
S035A		36:S35*										1 S35A
S036	546:S36	36:S36								442:S36		1 S36
S037	546:S37	36:S37								442:S37		1 S37
S038	546:S38	36:S38								442:S38		1 S38
S039	546:S39	36:S39								442:S39		1 S39

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UniKemet database of Egyptian Hieroglyphs for UCS encoding													
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd	C2005
S040	546:S40	36:S40								442:S40		1	S40
S041	546:S41	36:S41								442:S41		1	S41
S042	546:S42	36:S42								442:S42		1	S42
S043	546:S43	36:S43								442:S43		1	S43
S044	546:S44	35:S44								442:S44		1	S44
S045	546:S45	36:S45								442:S45		1	S45
S046					5:S46							1	S50
T001	546:T1									442:T1		1	T1
T002	546:T2									442:T2		1	T2
T003	546:T3									442:T3		1	T3
T003A					5:T3*							1	T43
T004	546:T4									442:T4		1	T4
T005	546:T5									442:T5		1	T5
T006	546:T6									442:T6		1	T6
T007	546:T7									442:T7		1	T7
T007A	546:T7*				5:T7*					442:T7A		1	T7A
T008	546:T8									442:T8		1	T8
T008A	546:T8*				5:T8*					442:T8A		1	T8A
T009	546:T9									442:T9		1	T9
T009A	546:T9*				5:T9*					442:T9A		1	T9A
T010	546:T10									442:T10		1	T10
T011	546:T11									442:T11		1	T11
T011A						8-2:065:700						1	T60
T012	546:T12									442:T12		1	T12
T013	546:T13									442:T13		1	T13
T014	546:T14									443:T14		1	T14
T015	546:T15									443:T15		1	T15
T016	546:T16									443:T16		1	T16
T016A				246:T16*	5:T36							1	T16A
T017	546:T17									443:T17		1	T17
T018	546:T18									443:T18		1	T18
T019	546:T19									443:T19		1	T19

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UniKemet database of Egyptian Hieroglyphs for UCS encoding													
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd	C2005
T020	546:T20									443:T20		1	T20
T021	546:T21									443:T21		1	T21
T022	546:T22									443:T22		1	T22
T023	546:T23									443:T23		1	T23
T024	546:T24									443:T24		1	T24
T025	546:T25									443:T25		1	T25
T026	546:T26									443:T26		1	T26
T027	546:T27									443:T27		1	T27
T028	546:T28									443:T28		1	T28
T029	546:T29									443:T29		1	T29
T030	546:T30									443:T30		1	T30
T031	546:T31									443:T31		1	T31
T032	546:T32									443:T32		1	T32
T032A					5:T32*							1	T32B
T033	546:T33									443:T33		1	T33
T033A					5:T33*							1	T33B
T034	546:T34									443:T34		1	T34
T035	546:T35									443:T35		1	T35
T036				247:T36	5:T37							1	T141
U001	546:U1	38:U1								443:U1		1	U1
U002	546:U2	38:U2								443:U2		1	U2
U003	546:U3	38:U3								443:U3		1	U3
U004	546:U4	38:U4								443:U4		1	U4
U005	546:U5	38:U5								443:U5		1	U5
U006	546:U6	38:U6								443:U6		1	U6
U006A					5:U6*							1	U6A
U006B					5:U6**							1	U6B
U007	546:U7	38:U7								443:U7		1	U7
U008	546:U8	38:U8								443:U8		1	U8
U009	546:U9	38:U9								443:U9		1	U9
U010	546:U10	38:U10								443:U10		1	U10
U011	546:U11	38:U11								443:U11		1	U11

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UniKemet database of Egyptian Hieroglyphs for UCS encoding												
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd C2005
U012	546:U12	38:U12								443:U12		1 U12
U013	546:U13	38:U13								443:U13		1 U13
U014	546:U14	38:U14								443:U14		1 U14
U015	546:U15	38:U15								443:U15		1 U15
U016	546:U16	38:U16								444:U16		1 U16
U017	546:U17	38:U17								444:U17		1 U17
U018	546:U18	38:U18								444:U18		1 U18
U019	546:U19	38:U19								444:U19		1 U19
U020	546:U20	38:U20								444:U20		1 U20
U021	546:U21	38:U21								444:U21		1 U21
U022	546:U22	38:U22								444:U22		1 U22
U023	546:U23	38:U23								444:U23		1 U23
U023A				247:U23*	5:U23*							1 U23F
U024	546:U24	38:U24								444:U24		1 U24
U025	546:U25	38:U25								444:U25		1 U25
U026	546:U26	38:U26								444:U26		1 U26
U027	546:U27	38:U27								444:U27		1 U27
U028	546:U28	38:U28								444:U28		1 U28
U029	546:U29	38:U29								444:U29		1 U29
U029A					5:U29*							1 U29A
U030	546:U30	38:U30								444:U30		1 U30
U031	546:U31	38:U31								444:U31		1 U31
U032	546:U32	38:U32								444:U32		1 U32
U032A				247:Ff7								1
U033	546:U33	38:U33								444:U33		1 U33
U034	546:U34	38:U34								444:U34		1 U34
U035	546:U35	38:U35								444:U35		1 U35
U036	546:U36	38:U36								444:U36		1 U36
U037	546:U37	38:U37								444:U37		1 U37
U038	546:U38	38:U38								444:U38		1 U38
U039	546:U39	38:U39								444:U39		1 U39
U040	546:U40	38:U40								444:U40		1 U40

UniKemet database of Egyptian Hieroglyphs for UCS encoding												
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd C2005
U041	546:U41	38:U41								444:U41		1 U41
U042	546:(O30)									443:U109		1 O30U
V001	546:V1	39:V1					61:AAc632	57:AAc632	61:AAc632	444:V1		1 V1
V001A	199:200						61:AAc633	57:AAc633	61:AAc633	99:200		1
V001B	194:300						61:AAc634	57:AAc634	61:AAc634	101:300		1
V001C							61:AAc635	57:AAc635	61:AAc635	106:400		1
V001D	201:500						61:AAc636s	57:AAc636	61:AAc636			1
V001E	192:600						61:AAc637s	57:AAc637	61:AAc637	97:600		1
V001F	200:700						61:AAc638s	57:AAc638	61:AAc638	107:700		1
V001G							61:AAc639	57:AAc639	61:AAc639			1
V001H	191:900											1
V001I							61:AAc636					1
V002	546:V2	39:V2								444:V2		1 V2
V002A				247:Ff6								1
V003	546:V3	39:V3								444:V3		1 V3
V004	546:V4	39:V4								444:V4		1 V4
V005	546:V5	39:V5								444:V5		1 V5
V006	546:V6	39:V6								444:V6		1 V6
V007	546:V7	39:V7								444:V7		1 V7
V007A							6:V7*					1 V7A
V007B			95:Ff2									1
V008	546:V8	39:V8								444:V8		1 V8
V009	546:V9	39:V9								444:V9		1 V9
V010	546:V10	39:V10								445:V10		1 V10
V011	546:V11	39:V11								445:V11		1 V11
V011A		39:V11*a										1 V11A
V011B		39:V11*a'										1 V11B
V011C												1
V012	546:V12	39:V12								445:V12		1 V12
V012A							6:V12*					1 V12A
V012B							6:V12**					1 V12B
V013	546:V13	39:V13								445:V13		1 V13

UniKemet database of Egyptian Hieroglyphs for UCS encoding												
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd C2005
V014	546:V14	39:V14								445:V14		1 V14
V015	546:V15	39:V15								445:V15		1 V15
V016	546:V16	39:V16								445:V16		1 V16
V017	546:V17	39:V17								445:V17		1 V17
V018	546:V18	39:V18								445:V18		1 V18
V019	546:V19	39:V19								445:V19		1 V19
V020	546:V20	39:V20					60:AAb623	56:AAb623		445:V20		1 V20
V020A	192:20							56:AAb624	60:AAb624	100:20		1
V020B	201:30						60:AAb625	56:AAb625	60:AAb625	99:30		1
V020C	198:40							56:AAb626		107:40		1
V020D	197:50						60:AAb627	56:AAb627	60:AAb627	107:50		1
V020E	194:60						60:AAb628	56:AAb628	60:AAb628	101:60		1
V020F	192:70						60:AAb629	56:AAb629	60:AAb629			1
V020G	196:80						60:AAb630	56:AAb630	60:AAb630	102:80		1
V020H							60:AAb631	56:AAb631	60:AAb631			1
V020I	191:20						60:AAb624			97:20		1
V020J	194:30									106:30		1
V020K							60:AAb626		60:AAb626			1
V020L	191:50											1
V021	546:V21	39:V21								445:V21		1 V21
V022	546:V22	39:V22								445:V22		1 V22
V023	546:V23	39:V23								445:V23		1 V23
V023A				247:V23*	6:V23*							1
V024	546:V24	39:V24								445:V24		1 V24
V025	546:V25	39:V25								445:V25		1 V25
V026	546:V26	39:V26								445:V26		1 V26
V027	546:V27	39:V27								445:V2[7]		1 V27
V028	546:V28	39:V28								445:V28		1 V28
V028A					6:V28*							1 V71
V029	546:V29	39:V29								445:V29		1 V29
V029A				247:V29*	6:V29*							1 V81
V030	546:V30	39:V30								445:V30		1 V30

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UniKemet database of Egyptian Hieroglyphs for UCS encoding												
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd C2005
V030A		39:V30*										1
V031	546:V31	39:V31								445:V31		1 V31
V031A	546:V31*	39:V31*								445:V31a		1 V31A
V032	546:V32	39:V32								445:V32		1 V32
V033	546:V33	39:V33								445:V33		1 V33
V033A							8-4:10:299					1 V33A
V034	546:V34	39:V34								445:V34		1 V34
V035	546:V35	39:V35								445:V35		1 V35
V036	546:V36	39:V36								445:V36		1 V36
V037	546:V37	39:V37								445:V37		1 V37
V037A					6:V37*							1 V37A
V038	546:V38	39:V38								445:V38		1 V38
V039	546:V39			247:V39	6:V39*					445:V39		1 V39
V040	191:10						63:BB665	60:BB665	62:BB665			1 V20S
V040A	201:20						64:BB666	60:BB666	62:BB666			1
W001	547:W1	40:W1								445:W1		1 W1
W002	547:W2	40:W2								446:W2		1 W2
W003	547:W3	40:W3								446:W3		1 W3
W003A		40:W3*										1 W3B
W004	547:W4	40:W4								446:W4		1 W4
W005	547:W5	40:W5								446:W5		1 W5
W006	547:W6	40:W6								446:W6		1 W6
W007	547:W7	40:W7								446:W7		1 W7
W008	547:W8	40:W8								446:W8		1 W8
W009	547:W9	40:W9								446:W9		1 W9
W009A					6:W9*							1 W9D
W010	547:W10	40:W10								446:W10		1 W10
W010A	547:W10*				6:W10*					446:W10A		1 W10A
W011	547:W11	40:W11								446:W11		1 W11
W012	547:W12	40:W12								446:W12		1 W12
W013	547:W13	40:W13								446:W13		1 W13
W014	547:W14	40:W14								446:W14		1 W14

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UniKemet database of Egyptian Hieroglyphs for UCS encoding													
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd	C2005
W014A		40:W14*										1	
W015	547:W15	40:W15								446:W15		1	W15
W016	547:W16	40:W16								446:W16		1	W16
W017	547:W17	40:W17								446:W17		1	W17
W017A					6:W18*					446:W17a		1	
W018	547:W18	40:W18								446:W18		1	W18
W018A										446:W18a		1	W17C
W019	547:W19	40:W19								446:W19		1	W19
W020	547:W20	40:W20								446:W20		1	W20
W021	547:W21	40:W21								446:W21		1	W21
W022	547:W22	40:W22								446:W22		1	W22
W023	547:W23	40:W23								446:W23		1	W23
W024	547:W24	40:W24								446:W24		1	W24
W024A		40:W24*										1	W24A
W025	547:W25	40:W25								446:W25		1	W25
X001	547:X1	41:X1								446:X1		1	X1
X002	547:X2	41:X2								446:X2		1	X2
X003	547:X3	41:X3								446:X3		1	X3
X004	547:X4	41:X4								447:X4		1	X4
X004A		41:X4*								447:X4a		1	X4A
X005	547:X5	41:X5								447:X5		1	X5
X006	547:X6	41:X6								447:X6		1	X6
X006A		41:X6*										1	
X007	547:X7	41:X7								447:X7		1	X7
X008	547:X8	41:X8								447:X8		1	X8
Y001	547:Y1	41:Y1								447:Y1		1	Y1
Y001A	533:Y1(v)	41:Y1(v)								447:Y1(v)		1	Y1V
Y002	547:Y2	41:Y2								447:Y2		1	Y2
Y003	547:Y3	41:Y3								447:Y3		1	Y3
Y004	547:Y4	41:Y4								447:Y4		1	Y4
Y005	547:Y5	41:Y5								447:Y5		1	Y5
Y006	547:Y6	41:Y6								447:Y6		1	Y6

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UniKemet database of Egyptian Hieroglyphs for UCS encoding													
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd	C2005
Y007	547:Y7	41:Y7								447:Y7		1	Y7
Y008	547:Y8	41:Y8								447:Y8		1	Y8
Z001	547:Z1	42:Z1					59:AAa614	55:AAa614	59:AAa614	447:Z1		1	Z1
Z002	547:Z2	42:Z2								447:Z2		1	Z2
Z003	547:Z3	42:Z3								447:Z3		1	Z3
Z003A		42:Z2 also								447:Z3a		1	Z3A
Z004	547:Z4	42:Z4								447:Z4		1	Z4
Z004A	536:Z4v											1	
Z005	547:Z5	42:Z5								447:Z5		1	Z5
Z005A		42:Z5*										1	Z5A
Z006	547:Z6	42:Z6								447:Z6		1	Z6
Z007	547:Z7	42:Z7								447:Z7		1	Z7
Z008	547:Z8	42:Z8								447:Z8		1	Z8
Z009	547:Z9	42:Z9								447:Z9		1	Z9
Z010	547:Z10	42:Z10								447:Z10		1	Z10
Z011	547:Z11	42:Z11								447:Z11		1	Z11
Z012			95:Z12									1	Z12
Z013					6:Z13							1	
Z014			95:Ff1		6:Ff1							1	
Z015										447:Z1		1	Z1
Z015A	192:2						59:AAa615	55:AAa615	59:AAa615	447:Z49		1	
Z015B		42:Z2*					59:AAa616	55:AAa616	59:AAa616	447:Z2(a)		1	Z2D
Z015C	191:4						59:AAa617	55:AAa617	59:AAa617	97:4		1	
Z015D	192:5									97:5		1	
Z015E	192:6									102:6		1	
Z015F	191:7									97:7		1	
Z015G	191:8									102:8		1	
Z015H	197:9						59:AAa622	55:AAa622				1	
Z015I	191:5						59:AAa618	55:AAa618	59:AAa618	447:Z(2d)		1	
Z016							63:BB656					1	Z1A
Z016A	191:2						63:BB657	59:BB65[7]	61:BB657	103:2		1	
Z016B							8-4:5:654	64:BB658	60:BB658	62:BB658		1	Z3B

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UniKemet database of Egyptian Hieroglyphs for UCS encoding												
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd C2005
Z016C	191:4						64:BB659	60:BB659	62:BB659			1
Z016D	191:5						64:BB660	60:BB660	62:BB660			1
Z016E							64:BB661	60:BB661	62:BB661			1
Z016F							64:BB662	60:BB662	62:BB662	103:7		1
Z016G	191:8						64:BB663	60:BB663	62:BB663			1
Z016H								60:BB664				1
AA001	547:Aa1	43:Aa1								448:Aa1		1 AA1
AA002	547:Aa2	43:Aa2								448:Aa2		1 AA2
AA003	547:Aa3	43:Aa3								448:Aa3		1 AA3
AA004	547:Aa4	43:Aa4								448:Aa4		1 AA4
AA005	547:Aa5	43:Aa5								448:Aa5		1 AA5
AA006	547:Aa6	43:Aa6								448:Aa6		1 AA6
AA007	547:Aa7	43:Aa7								448:Aa7		1 AA7
AA007A		43:Aa7*										1 AA7A
AA007B				247:Aa7**	6:Aa7**							1 AA7B
AA008	547:Aa8	43:Aa8								448:Aa8		1 AA8
AA009	547:Aa9	43:Aa9								448:Aa9		1 AA9
AA010	547:Aa10	43:Aa10								448:Aa10		1 AA10
AA011	547:Aa11	43:Aa11								448:Aa11		1 AA11
AA012	547:Aa12	43:Aa12								448:Aa12		1 AA12
AA013	547:Aa13	43:Aa13								448:Aa13		1 AA13
AA014	547:Aa14	43:Aa14								448:Aa14		1 AA14
AA015	547:Aa15	43:Aa15								448:Aa15		1 AA15
AA016	547:Aa16	43:Aa16								448:Aa16		1 AA16
AA017	547:Aa17	43:Aa17								448:Aa17		1 AA17
AA018	547:Aa18	43:Aa18								448:Aa18		1 AA18
AA019	547:Aa19	43:Aa19								448:Aa19		1 AA19
AA020	547:Aa20	43:Aa20								448:Aa20		1 AA20
AA021	547:Aa21	43:Aa21								448:Aa21		1 AA21
AA022	547:Aa22	43:Aa22								448:Aa22		1 AA22
AA023	546:Aa23	43:Aa23								448:Aa23		1 AA23
AA024	546:Aa24	43:Aa24								448:Aa24		1 AA24

UniKemet database of Egyptian Hieroglyphs for UCS encoding												
Name	G1957	G1928	G1929	G1931	G1953	GITB	M1909	M1927	M1936	A1999	F1962	Amd C2005
AA025	547:Aa25	43:Aa25								448:Aa25		1 AA25
AA026	547:Aa26	43:Aa26								448:Aa26		1 AA26
AA027	547:Aa27	43:Aa27								448:Aa27		1 AA27
AA028	547:Aa28	43:Aa28								448:Aa28		1 AA28
AA029	547:Aa29	43:Aa29								448:Aa29		1 AA29
AA030	547:Aa30	43:Aa30								448:Aa30		1 AA30
AA031	547:Aa31	43:Aa31								448:Aa31		1 AA31
AA032	546:Aa32	43:Aa32								448:Aa32		1 AA32