

CONVERSION OF DATES FROM THE GREGORIAN CALENDAR TO THE MISRI CALENDAR AND VICE VERSA

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The conversion of dates from the Gregorian Calendar to the Misri Calendar and its reverse is quite an important requirement for researchers in history of Daawat Hadiyah. Many a time, even laymen wish they had an easy way to convert the dates from one to the other.

With this view in mind, the author has prepared tables for this requirement. Although detailed calendars are available for relating the Gregorian and the Hijri – Lunar calendar, they are not useful to us, because the variation in dates is upto 2 days and this variation has a complicated relation to the dates.

The Misri calendar is said to have originated from the 5th Imam Moulana Jaafar as Sadiq. The basic tenets propounded include:

1. The era starts such that the 1st of Moharram of the 1st year of the Misri calendar falls on 15th July 622 AD.
2. There are 354 days in one year divided into 12 months, the odd numbered months having 30 days and the even numbered months 29 days.
3. To compensate for the discrepancy in the movement of the moon and the calendar, a number of leap years are incorporated. This is a cycle of 30 years and there are 11 leap years in this cycle.
4. To find out if a certain year is a leap year or not, the year is divided by 30. If the remainder is one of these numbers 2, 5, 8, 10, 13, 16, 19, 21, 24, 27 or 29, then that year is a leap year.
5. In a leap year, one day is added to the last month, i.e. Dhul Hajj, so it will have 30 days instead of 29.

The system of conversion given here is simple. The days are numbered from a convenient date which here is chosen as the beginning of the year 600 AD. Thus the 1st of January 600 AD is day number 1, from this we get that the 1st of Muharram 1 AH is day number 8231. This number of the day is called the ordinal number of the day.

The ordinal number of the date which is to be found is calculated from the tables and the corresponding date for the same ordinal number in the other system is found. The two tables, with three stages each is given below, with two examples which explain the method.

Table 1 – Ordinal number of days in the Misri Calendar

Stage 1 – Ordinal numbers for every leap cycle of 30 years – There are 10631 days in a 30 year cycle

| Misri Year | Ordinal No. | Misri Year | Ordinal No. | Misri Year | Ordinal No. |
|------------|-------------|------------|-------------|------------|-------------|
| 0 | 8231 | 510 | 188958 | 1020 | 369685 |
| 30 | 18862 | 540 | 199589 | 1050 | 380316 |
| 60 | 29493 | 570 | 210220 | 1080 | 390947 |
| 90 | 40124 | 600 | 220851 | 1110 | 401578 |
| 120 | 50755 | 630 | 231482 | 1140 | 412209 |
| 150 | 61386 | 660 | 242113 | 1170 | 422840 |
| 180 | 72017 | 690 | 252744 | 1200 | 433471 |
| 210 | 82648 | 720 | 263375 | 1230 | 444102 |
| 240 | 93279 | 750 | 274006 | 1260 | 454733 |
| 270 | 103910 | 780 | 284637 | 1290 | 465364 |
| 300 | 114541 | 810 | 295268 | 1320 | 475995 |
| 330 | 125172 | 840 | 305899 | 1350 | 486626 |
| 360 | 135803 | 870 | 316530 | 1380 | 497257 |
| 390 | 146434 | 900 | 327161 | 1410 | 507888 |
| 420 | 157065 | 930 | 337792 | 1440 | 518519 |
| 450 | 167696 | 960 | 348423 | 1470 | 529150 |
| 480 | 178327 | 990 | 359054 | 1500 | 539781 |

Table 1 – Stage 2

| Misri Year | Ordinal No. | Misri Year | Ordinal No. | Misri Year | Ordinal No. |
|------------|-------------|------------|-------------|------------|-------------|
| 1 | 0 | 11 | 3544 | 21 | 7087 |
| 2 | 354 | 12 | 3898 | 22 | 7442 |
| 3 | 709 | 13 | 4252 | 23 | 7796 |
| 4 | 1063 | 14 | 4607 | 24 | 8150 |
| 5 | 1417 | 15 | 4961 | 25 | 8505 |
| 6 | 1772 | 16 | 5315 | 26 | 8859 |
| 7 | 2126 | 17 | 5670 | 27 | 9213 |
| 8 | 2480 | 18 | 6024 | 28 | 9568 |
| 9 | 2835 | 19 | 6378 | 29 | 9922 |
| 10 | 3189 | 20 | 6733 | 30 | 10277 |

Table 1 – Stage 3

| Month | Ordinal No. | Month | Ordinal No. | Month | Ordinal No. |
|--------------|-------------|---------------|-------------|------------|-------------|
| Muharram | 0 | Jumadal Awwal | 118 | Ramadan | 236 |
| Safar | 30 | Jumadas Sani | 148 | Shawwal | 266 |
| Rabiul Awwal | 59 | Rajab | 177 | Dhul Qada | 295 |
| Rabiul Sani | 89 | Shaban | 207 | Dhul Hajja | 325 |

Table 2 – Ordinal Number of days in the Gregorian Calendar

Stage 1 - Century

| Year | Ordinal No | Year | Ordinal No | Year | Ordinal No | Year | Ordinal No |
|------|------------|------|------------|-------|------------|------|------------|
| 600 | 0 | 1000 | 146100 | 1400 | 292200 | 1700 | 401764 |
| 700 | 36525 | 1100 | 182625 | 1500 | 328725 | 1800 | 438288 |
| 800 | 73050 | 1200 | 219150 | 1582* | 358665 | 1900 | 474812 |
| 900 | 109575 | 1300 | 255675 | 1600 | 365240 | 2000 | 511337 |

Table 2 – Stage 2

| Year | Ordinal No | Year | Ordinal No | Year | Ordinal No |
|------|------------|------|------------|------|------------|
| 4 | 1461 | 36 | 13149 | 68 | 24837 |
| 8 | 2922 | 40 | 14610 | 72 | 26298 |
| 12 | 4383 | 44 | 16071 | 76 | 27759 |
| 16 | 5844 | 48 | 17532 | 80 | 29220 |
| 20 | 7305 | 52 | 18993 | 84 | 30681 |
| 24 | 8766 | 56 | 20454 | 88 | 32142 |
| 28 | 10227 | 60 | 21915 | 92 | 33603 |
| 32 | 11688 | 64 | 23376 | 96 | 35064 |

Table 2 – Stage 3

| Year → Month ↓ | 0 | 1 | 2 | 3 | Year → Month ↓ | 0 | 1 | 2 | 3 |
|-------------------|-----|-----|-----|------|-------------------|-----|-----|------|------|
| Jan | 0 | 366 | 731 | 1096 | July | 182 | 547 | 912 | 1277 |
| Feb | 31 | 397 | 762 | 1127 | Aug | 213 | 578 | 943 | 1308 |
| Mar | 60 | 425 | 790 | 1155 | Sep | 244 | 609 | 974 | 1339 |
| Apr | 91 | 456 | 821 | 1186 | Oct | 274 | 639 | 1004 | 1369 |
| May | 121 | 486 | 851 | 1216 | Nov | 305 | 670 | 1035 | 1400 |
| June | 152 | 517 | 882 | 1247 | Dec | 335 | 700 | 1065 | 1430 |

* In the year 1582 the Julian Calendar was replaced by the Gregorian Calendar in October. Thus after 4th October the next day was 15th October instead of 5th October.

The following examples give the method of using these tables:

Example 1: How to find the Misri date for 31st December 1958

We begin with the century in Table 2, Stage 1. The ordinal number corresponding to the year 1900 is 474812. Then we look for the next lower number to 58 in Table 2, Stage 2 and that is 56. The ordinal number corresponding to 56 is 20454. Next see the ordinal number corresponding to Dec of year 2 in Table 2, Stage 3. This is because $58 - 56 = 2$. This ordinal number is 1065. To find the ordinal number of 31st December we take 31.

Add all these number thus : $474812 + 20454 + 1065 + 31 = 496362$. Thus the ordinal number for 31st Dec 1958 is 496362.

Now we use the Table 1 for finding the Misri date. First, find the nearest smaller number with respect to 496362 in Stage 1, it is 486626 corresponding to 1350 Hijri. The difference between 496362 and 486626 is $496362 - 486626 = 9736$

Now similarly find the nearest smaller number with respect to 9736 in stage 2, it is 9568, corresponding to the year 28. Thus the year is $1350 + 28 = 1378$ Hijri

The difference between $9736 - 9568 = 168$

The nearest smaller number with respect to 168 in stage 3 is 148 corresponding to Jumadassani. Thus the month is Jumadassani. The difference between these two numbers is $168 - 148 = 20$, which gives the date.

Thus 31st Dec 1958 AD corresponds to 20th Jumadassani 1378 Hijri as per the Misri Calendar.

Example 2: How to find the Gregorian date for 18th Shaban 1375 Hijri

Firstly the smallest year nearest to 1375 in Table 1 – Stage 1 is 1350, and the ordinal number corresponding to it is 486626.

Secondly, $1375 - 1350 = 25$ years. The ordinal number corresponding to 25 in stage 2 is 8505 and thirdly in stage 3 the ordinal number for Shaban is 207. Adding all these ordinal numbers and the dated we get $486626 + 8505 + 207 + 18 = 495356$

Thus the ordinal number for 18th Shaban, 1375 is 495356.

To find the corresponding Gregorian date, we look for the nearest smaller ordinal number in Table 2 Stage 1. It is 474812 and corresponds to 1900 AD. The difference is $495356 - 474812 = 20544$

The nearest smaller ordinal number in Table 2 Stage 2 is 20454, which corresponds to the year 56. The difference is $20544 - 20454 = 90$ days.

So, the year is 1956. The lower nearest ordinal number in Table 2 Stage 3 is 60 for March so the month is March. $90 - 60 = 30$, so the date is 30th March 1956.