

NanakShahi Calendar

ਨਾਨਕਸ਼ਾਹੀ ਕੈਲੰਡਰ

Most of the major communities have their own calendar, which takes care of important historical events in a highly systematic manner without any confusion. Sikhs have a very rich heritage; hence, there was a strong need to have such a calendar. Earlier, we used to follow Bikrmi Samat, which is based on Lunar System. Any calendar system based on Lunar System will suffer from uncertainty of dates with respect to English calendar (Christian era calendar) (Gregorian calendar), which is based on the Solar System. **The year according to Lunar System is of 354 days; whereas Solar Year is of 365/366 days.** (Appendix)

In Lunar System months are not related to the climate and keep on changing every year. Christian era calendar is only 26 seconds more than the Solar Year and Bikrmi calendar is 20 minutes more than the solar year. **Hence, there is approximately one day difference after 3300 years in case of Christian era calendar. Whereas, there is approximately one day difference after 70 or 71 years in case of Bikrmi calendar. Hence Vaisakhi will be falling on the following dates in case of Bikrmi calendar. (09.04.1753, 10.04.1799, 12.04.1899, 14.04.1999, 15.04.2100, etc.). After 1100 years it will come in the month of May. After 13000 years it will come in the month of October. Barah Maha Majh (Bani Guru Arjan Sahib) and Barah Maha Tukhari (Bani Guru Nanak Sahib) are related to climate.**

Dates of Gurburbs keep on changing according to Bikrmi calendar. Sometimes they are behind by 10/11 days as compared to English calendar and sometimes ahead by 18/19 days. The year according to moon is of 354 days, which is less by 11 days from the Solar Year. Hence, in order to adjust with the Solar Year, one month is to be increased after every 3 or 4 year. In the additional month of Jeth (Mal Mas) no Gurburb is celebrated which is not according to Gurbani principles. According to Gurbani no day or month is good or bad.

**ਤੁਖਾਰੀ ਛੰਤ ਮਹਲਾ ੧ ਬਾਰਹ ਮਾਹਾ ॥ ਬੇ ਦਸ ਮਾਹ ਰੁਤੀ ਥਿਤੀ ਵਾਰ ਭਲੇ ॥ ਘੜੀ ਮੂਰਤ ਪਲ ਸਾਚੇ
ਆਏ ਸਹਜਿ ਮਿਲੇ ॥ (੧੧੦੯-੧੧੧੦)**

ਮਾਹ ਦਿਵਸ ਮੂਰਤ ਭਲੇ ਜਿਸ ਕਉ ਨਦਰਿ ਕਰੇ ॥ ਨਾਨਕੁ ਮੰਗੈ ਦਰਸ ਦਾਨੁ ਕਿਰਪਾ ਕਰਹੁ ਹਰੇ
॥੧੪॥੧॥ (੧੩੬)

Prakash Divas of Guru Gobind Singh Sahib is sometimes twice in a Solar Year and sometimes not even once in a Solar Year. Hence, if Gurburbs are celebrated according to the Solar Year then the dates will fall on the same day every year. The problem of two or nil Gurburb also will not arise.

- **The process of implementing the Solar year started on 1906 (S. Karm Singh Historian, 01.11.1912).**
- **It is very difficult to remember the dates, as these keeps on changing every year according to Bikrmi Calendar. Hence, instead of Gurburbs more attention is paid to Aamavas and Purnamashi, which are not approved by Gurmat. (Prof. Sahib Singh 1948).**
- **All the Gurburbs should be celebrated according to Solar System. (S. Randhir Singh, April 1977).**

Therefore, on the 300th year of Khalsa Panth, the Shromani Gurdwara Parbandhak Committee released the New NanakShahi Calendar (Prepared by S. Pal Singh Purewal) and decided to celebrate the Gurburbs according to that. NanakShahi calendar has all the basic features of a modern and independent Sikh calendar. The first month is Chet as mentioned in Gurbani and all other months are according to climate. The months are:

Chet = 31 days,	Vaisakh = 31 days,	Jeth = 31 days,
Haarh = 31 days,	Saavan = 31 days,	Bhaadon = 30 days,
Assu = 30 days,	Kattak = 30 days,	Maggar = 30 days,
Poh = 30 days,	Maagh = 30 days,	Phagun = 30 days.

In leap year the month of Phagun will be of 31 days (February is of 29 days). In this calendar, leap year will have the day added in the last month i.e. Phagun and not in between month i.e. February. The beginning of every month of NanakShahi Calendar will correspond to Christian era calendar as follows:

1 Chet = 14 March 1 Vaisakh = 14 April 1 Jeth = 15 May

1 Haarh = 15 June 1 Saavan = 16 July 1 Bhaadon = 16 August
 1 Assu = 15 September 1 Kattak = 15 October 1 Maggar = 14 November
 1 Poh = 14 December 1 Maagh = 13 January 1 Phagun = 12 February

In case of leap year, some of the dates will differ from Christian era calendar by one day, from 1st March to 13th March. All the dates mentioned in the NanakShahi calendar will be the true dates as per this system. **None of these dates will change every year. Hence, the dates of Gurburbs will remain same for all the years. Also there will be no question of same event happening twice a year.**

Both NanakShahi calendar and Christian era calendar are based on Solar Year. Christian era calendar has days of months as:

January = 31 days	February=28/29 days	March = 31 days
April = 30 days	May = 31 days	June = 30 days
July = 31 days	August = 31 days	September= 30 days
October = 31 days	November = 30 days	December = 31 days

The number of days selected for the months are not in any systematic order in the Christian era calendar. The month of February that varies in the leap year, is also the second month and not the first or last month of the year. **These deficiencies were improved in the NanakShahi calendar. The first five months are of 31 days and last 7 months are of 30 days. The additional day in the leap year is added in the last month of the year (Phagun) and not in between. Hence, NanakShahi calendar is a modern and improvised form of Christian era calendar.**

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Appendix

Gregorian calendar is being commonly used these days. Common years contain 365 days. Every fourth year is a leap year of 366 days. Century not divisible by 400 is the common year of 365 days. Whereas, century divisible by 400 is a leap year. A further refinement, the designation of years evenly divisible by 4000 as common year (not leap year); will keep the Gregorian calendar (Solar calendar) accurate to within one day in 20,000 years.

Earlier Julian calendar was being used which had all centuries as non leap year. In order to correct for the shift of a few days, Gregorian calendar was adopted which had century divisible by 400 as leap year. The change over from Julian calendar to Gregorian calendar was adopted by advancing 10 days from 4 October 1582 to 15 October 1582 by Roman Catholic countries. Gregorian calendar was adopted by Great Britain in 1752. The change over from Julian calendar to Gregorian calendar was adopted by 11 days advancing from September 2, 1752 to September 14, 1752.

Now a days the leap second corrects for the differences in the earth's rate of rotation from year to year. It is usually added or subtracted from the last minute of the year. This accuracy has become possible due to Atomic clocks.

Additional information

Tropical year or year of seasons: This is the Common Solar year or calendar year. This is the time between two successive occurrences of the vernal equinox i.e. of the moment when the sun apparently crosses the celestial equator moving earth. (March). Tropical year has 365 days 5 hours 48 minutes 46 seconds.

Sidereal year: Sidereal year is the time taken by the Sun to return to the same place in its annual apparent journey against the background of the stars. Sidereal year has 365 days 6 hours 9 minutes 9.5 seconds. This is seldom used except in the calculation of astronomy. Because of the precession of the equinoxes (an effect of a slow wobble in the Earth's rotation), the Solar year is shorter than the Sidereal year.

Anomalistic year: The Anomalistic year is the time between two passages of the Earth through perihelion, the point in its orbit nearest the Sun. The Anomalistic year has 365 days 6 hours 13 minutes 53 seconds.

Lunar year: A Lunar year is of 12 synodic months (12 cycles of Lunar phases). Lunar year is about 354 days long.

Cosmic year: A Cosmic year is the time (about 225,000,000 years) needed for the Solar system to revolve once around the centre of Galaxy.

Mean Solar day: The mean Solar day is the average value of the Solar day, which changes slightly in length during the year as Earth's speed in its orbit varies.

Sidereal day: Sidereal day is the time required for the Earth to rotate once relative to the background of the stars i.e. the time between two observed passages of a star over the same meridian of longitude.

Mean Solar day = 24 hours 3 minutes 56.555 seconds
Mean Sidereal day = 23 hours 56 minutes 4 seconds of mean Solar time.

Solar day is approximately 4 minutes longer than the sidereal day.

Month is the time required by the moon to revolve around the Earth.

Synodic Month or complete cycle of phases of the moon as seen from the Earth (Average) = 29 days 12 hours 44 minutes 3 seconds of mean Solar day = 29.530588 mean Solar day

Sidereal Month = 27 days 7 hours 43 minutes 12 seconds = 27.321661 days

Tropical Month (Time between passages of the Moon through the same celestial longitude) = 27 days 7 hours 43 minutes 5 seconds = 27.321582 days

	Days	Hours	Minutes	Seconds	Net seconds per year	Net days per year	Difference from Gregorian in seconds
Days in 400 years	146097						
Gregorian calendar	365.2425				31556952	365.2425	0
Tropical year	365	5	48	46	31556926	365.242199	26
Sidereal year	365	6	9	9.5	31558149.5	365.25636	-1197.5
Anomalistic year	365	6	13	53	31558433	365.259641	-1481
						<i>Difference in minutes</i>	<i>Difference in seconds</i>
Mean Solar day		24	0	0	86400	0	0
Sidereal days		23	56	4	86164	3.9333333	236

Hijri Calendar was not started by Prophet Muhammad Sahib.

Christian calendar was not started by Jesus Christ.

Hindu Calendar was not started by Shri Ram or by Shri Krishna

Buddha and Jain Calendars were not started by Lord Buddha or Lord Mahavir respectively.

In all cases the calendars were started by the devoted followers of each religion.

The Samvat or the Era counting was started by most kings from the accession date or year.