

There are conflicting dates for most events of our history, but for Guru Tegh Bahadur's shaheedi <sup>1</sup> there is near unanimity, it was on Thursday 11 November 1675: so why then is its 350th anniversary 24 November 2025?

No desi calendar is involved as such, and Thursday clinches that the 1675 date is Julian or old style, that continued in Britain till 1752, while we now use the Gregorian calendar, to which some European countries had switched already in 1582. This consisted in (i) adding 10 days to the date, the day-of-the-week<sup>2</sup> remaining the same, and (ii) deleting from then on February 29 from all years that are multiples of 100 but not of 400. However, many denominations still stick to the Julian calendar, i.e., never added those 10 days, and retained the leap days of 1700, 1800 and 1900. So December 25, 2025 old style will come a full 13 days after December 25, 2025, the reason why in Russia for example Christmas will be observed only on January 7, 2026. Likewise November 11, 2025 old style does come to November 24, 2025.

Thus *the 350th Julian anniversary of 11/11/1675 is 24/11/2025*, or, with the understanding that the left hand side is Julian and right Gregorian, it is true that  $11/11/1675 + 350 = 24/11/2025$ . On the other hand, using the same convention, we have  $11/11/1675 = 21/11/2025 - 350$ , i.e., *the 350th Gregorian anniversary of 11/11/1675 is 21/11/2025*, and there seems no reason why this is in any way inferior! Anyhow we have learnt in this process the simple algorithm for changing dates between Julian and Gregorian.

ਮੱਤਰ ਸੁਦੀ ਪੰਜਵੀਂ ਸੰਬਤ ੧੭੩੨—the fifth day of the waxing moon in the month of Maghar in Punjab's lunisolar Bikrami year 1732—is the day of Guruji's shaheedi in our tradition. This *panchmi* occurred on the 11th of Maghar 1732 Bikrami, and converts to 11 November 1675 Julian, but by whom this conversion was made first, apparently before 1752 A.D., is unknown.<sup>3</sup>

This calendar is still used, and popular ready-reckoners, like that below for 2025 Gregorian, convert in consonance with Bikrami (or Nanakshahi) calendar used by Darbar Sahib, Amritsar. From its 11th column, the *sangrand*—the first day of a month—of Maghar is 16th November, 2025. So 11 Maghar 2082 Bikrami, i.e., *the 350th Bikrami anniversary of 11/11/1675 is 26/11/2025* and a strong case can be made for this. Further, down the same column, *the panchmi of this Maghar falls on 25/11/2025*, which tugs at our hearts even more, because this was used in the terrible news of those four shaheedis conveyed to Anandpur; but if we switch to purely lunar years this is 3 months shy of 361st anniversary. So, it all depends on the chosen definition of anniversary, more important is *how*

<sup>1</sup>Following those of Bhai Mati Das, Bhai Sati Das and Bhai Dayala.

<sup>2</sup>This 'calendrical invariant' if given in an archive should be used to make/check conversion; indeed even within a calendar—see *The forgotten shaheeds of Dagshai* (2007) p.47 for a striking example—it shouldn't be ignored; and using, e.g., its p.50 you can check that 11/11/1675 Julian, i.e., 21/11/1675 Gregorian, was a Thursday.

<sup>3</sup>Now Purewal's *Jantri 500* (1994) converts between Julian/Gregorian, Bikrami, Hijri, ... all days of the 500 years from 1469 A.D., the year of Guru Nanak's birth; its pp. (i)-(vi) give a nice account of the calendars and the algorithms used in jantric calculations; then p. (vii) gives the notation in the next 500 pages, one for each CE year; from page 207 = 1675 – 1468 we see that 11 Nov 1675 Julian was Thursday, panchmi T5 of Maghar, and converts to 11 Maghar 1732 Bikrami, 3 Ramzan 1086 Hijri, ...

we observed it, but here too opinions differ. There was, for example, a drone show at Anandpur Sahib, apropos which I wrote: ‘there is no call for pomp and displays to honour Guruji’s shaheedi ... simply recalling its recent echo Khalra’s shaheedi suffices.’ Returning to things calendrical, thanks are due to our friend Tajinder Kaur, who told me about these reckoners two years ago, and has very kindly just sent that for 2026 Gregorian.<sup>4</sup>

ਸਾਲ 2025 ਵਿੱਚ ਆਉਣ ਵਾਲੇ ਦਸਵੋਂ, ਸੰਗਰਾਂਦ, ਪੂਰਨਮਾਸੀ, ਮੱਸਿਆ ਅਤੇ ਪੰਚਮੀ ਦੇ ਦਿਹਾੜੇ													
ਦੋਸ਼ੀ ਸਾਲ ਦੇ ਮਹੀਨੇ	ਪੋਤ ਮਾਘ	ਮਾਘ ਫੁਲਾਤ	ਫੁਲਾਤ ਚੇਤਰ	ਚੇਤਰ ਵੈਗਾਖ	ਵੈਗਾਖ ਜੇਠ	ਜੇਠ ਹਾਜ਼	ਹਾਜ਼ ਸਾਵਣ	ਸਾਵਣ ਤ੍ਰਾਵੰਦ	ਤ੍ਰਾਵੰਦ ਬਾਂਦੋਂ	ਬਾਂਦੋਂ ਅੰਗ੍ਰੇਜ਼	ਅੰਗ੍ਰੇਜ਼ ਕੱਤਕ	ਕੱਤਕ ਮੱਘਰ	ਮੱਘਰ ਪੋਹ
ਮਹੀਨਾ	ਜਨਵਰੀ	ਫਰਵਰੀ	ਮਾਰਚ	ਅਪ੍ਰੈਲ	ਮਈ	ਜੂਨ	ਜੁਲਾਈ	ਅਗਸਤ	ਸਤੰਬਰ	ਅਕਤੂਬਰ	ਨਵੰਬਰ	ਦਸੰਬਰ	
ਦਸਵੋਂ	09	07	09	07	07	05	05	04	02	02	01/30	30	
ਸੰਗਰਾਂਦ	14	12	14	13	14	15	16	16	16	17	16	15	
ਪੂਰਨਮਾਸੀ	13	12	14	12	12	11	10	09	07	07	05	04	
ਮੱਸਿਆ	29	27	29	27	27	25	24	23	21	21	20	19	
ਪੰਚਮੀ	04	02	04	02	02/31	30	29	28	27	26	25	25	

<sup>4</sup>Punjab’s new year starts from the sangrand of Chet, which falls in mid March, and from the 3rd column we see that Bikrami 2082 = 557 Nanakshahi started from 14th March 2025; and the reckoner for 2026 shows that 2083 = 558 will also start from 14th March; but this is not always the case. I also use nanakshahi.net’s conversion, though it can differ a bit, because they do tell me their programs are off Reingold and Dershowitz, *Calendrical calculations* (2018), a painstaking work done over decades, with this ‘ultimate edition’ giving succinct recursive definitions of about forty calendars from all over this planet, but lots of jargon is used to wrap informal language into these functions. For chronology, the ‘mean’ Indian calendars of pp. 155-166 were far better: they were fixed, and obeyed some nice calendric rules, e.g., formula (1.95) on p. 45. But, astrological compulsions had led to ‘truer’ calendars, pp. 336-372, well before 1469: so the desi non-Hijri dates in Punjab’s archives, of most interest to us, are most likely in Vikrama Era calendars of p.349 et seq. En passant: *true elliptical motion is equivalent to adding suitably to a mean cycle a Ptolemy epicycle*, p. 342, fn 5, which reminded me of Sternberg’s beautiful *Celestial mechanics* (1969). Beauty, alas, is fleeting in the full ‘truer’ story, which began as a feat of our astronomy: from about 1900 firang data, cf. van Wijk’s plea of 1926 on p. 358, has been freely used in desi jantris, to keep on adjusting this calendar to track astral conjunctions. Computers can crunch even ugly code, so much so that ingenious short cuts used in manual calculations are redundant, but it repels humans: luckily for our needs the 500 year almanac cited before suffices.