Calanders

Calendars

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① The last Day of a century cannot be

Tue, Thu, Sat

② The last Day of a century can be

Sun, Mon, Wed, Fri

③ The First Day of a century cannot be

Wed, Fri, Sun

The First day of a century can be

Mon, Tue, Thu, Sat

Non Leap Year / Normal Yr   (Feb 28)

① Jan & Oct — Same Calendar

② Feb, March, Nov

Feb 1 = March 1 ~ Nov 1

③ April, July (Same)

④ Sept, Dec (same)

Leap Year ↓   (has Feb 29)

① Jan, April, July (Same)

② Feb, August (same)

③ March, Nov

④ Sep, Dec

Calendars

If 24th Jan, 2015 is Tuesday, then 28th October 2015 would be which day?

24th Jan 2015 — Tuesday / 28th Oct 2015 →
Tue + 4 = (Saturday)

Jan + Feb + March + April + May + June + July + Aug + Sep + Oct
$\cancel{7}$ + $\cancel{28}$ + $\cancel{31}$ + $\cancel{30}$ + $\cancel{31}$ + $\cancel{30}$ + 31 + 31 + $\cancel{30}$ + $\cancel{28}$
0 + 0 + $\cancel{3}$ + $\cancel{2}$ + 3 + $\cancel{2}$ + 3 + 3 + 2 + 0

Normal Year
Jan = Oct

Feb = March = Nov

April = July

Sept = Dec

24th Jan — Tue
⇒ 24th Oct — Tue
28th Oct — ?

11 (+4 days)

25th — Wed
26th — Thy
27th — Fri
28th Oct 2015 — Sat

If 16th March 1988 is Tuesday, then 25th Nov, 1988 would be which day?

16th March = (16th Nov)
Tue   Tue

16th Nov — Tue
23rd Nov — Tue
24th Nov — Wed
25th Nov — Thursday

4) 88 (22
   8
   ——
   8
   [0]   — LY

If 4th Jan 1988 is Tuesday, then 25th May, 1988 would be which day?

Jan + Feb + March + April ⊥ May
27   + 29   + 31   + 30   + 25
6   + 1   + 3   (+ 2)   + 4

Tuesday + 2 days
———————————
25th May 1988 = Thursday

Calendars

If 25th May 1988 is Thursday, then 4th Jan, 1988 would be which day?

Jan + Feb + March + April ⊥ May
27   + 29   + 31   + 30   + 25
6   + 1   + 3   (+ -2) + 4

Thursday - 2 days
———————————
4th Jan '88 = (Tuesday)

If 12th oct 2013 is **Friday**, **then** 16th April 2013 would be which day?

Mon

A + M + June + July + Aug + Sep + Oct

14 + 31 + 36 + 31 + 31 + 30 + 12

3 + 2 + 3 + 3 + 7 + 8

17 = -4 days

Friday - 4 days

16th April 2013 ⇒ Monday

If 22nd April 2006 was Sunday, then

22nd April 2012 will be which day.

22nd April 2006 — Sunday   -1

b/o
Feb 29

22nd April 2007 → Monday

22nd April 2008 → Wednesday   -2 (∵ 29)

22nd April 2009 → Thursday   +1 (∵ Feb 28)

22nd April 2010 → Friday

22nd April 2011 → Saturday

22nd April 2012 → Monday   +2 (Feb 29)

⇒) 365 (52
     35
     ───
     15
     14
     ───
     (1)→ odd.

Calendars

If 22nd Jun 2009 was Sunday, then 12th May 2013 will be which day.

22nd — Jun 2009 — Sun

"   "   2010 — M

"   "   2011 — T

"   "   2012 — W

"   "   2013 — F } each

$\Rightarrow$ 365 (52)

$\dfrac{35}{15}$ (Mar)

(Feb 28) ① odd.

22nd Jan 2013 — Sat ✓

12th May 2013 — ?

Wed

| J + F + M + A + May |
| 31 + 28 + 31 + 30 + 12 |
| ② 0 + 3 + 2 + 5 |

$\bar{5}$

Friday + 5

$\Rightarrow$ Wednesday

Calendars

If 25th Nov, 1543 was Saturday,

Find 25th Nov, 2043 ?

Sol

After 500 yrs

$\Rightarrow$ 400 + 100 yrs

$\Rightarrow$ + 5 days

$\Rightarrow$ Sat + 5 = Thursday

$4\overline{\smash)100\smash)}$ 25-1 = NLY

$\dfrac{100}{0}$

+100y $\rightarrow$ +5 days

+200y $\rightarrow$ +3 days

+300y $\rightarrow$ +1 day

+400y $\rightarrow$ Same day

+500y $\rightarrow$ +5 days

(400+100)

+600 (400+200) +3 days

If 25th Nov 1843 was Saturday,
Find 25th Nov, 1543 ?
                    Fri
Sol

Before   Ans
100   -   5 day
200   -   3 day
300   -   1 day
400   -   Same day

Sat - 1 Day
=> Friday

$4 \overline{)100} (25-1$ = NLY
     $\underline{100}$
      $\overline{0}$

+100y → +5 days
+200y → +3 days
+300y → +1 day
+400y → Same day
+500y → +5 days
(400+100)
+600
(400+200) +3 days

Calendars

Which Year immediately after 2013 will have same
Calendar as 2013

$\dfrac{\text{Given Year}}{4}$ =

Rem	After
1 →	6 yrs
2 →	11 yrs
3 →	11 yrs
0 →	28 yr

20(13)   2014
4)13(3   4)14(3
  12   12
  ① — +6 yrs   ②

2013+6 = 2019   +11y
                  2014+11 = 2025

4)2016(4
   16
   ⓪ — +28y
(2044)

+6y
2013 → 201
2014 → 202
+11y
2015 → 202
+11y
2016 → 201
+28y
2017 ___
+(
2018
20

Calendars

Which Year immediately after 2013 will have same Calender as 2013

Rem	After	Before
1 →	+6 yrs	− 11 yrs
2 →	+11 yrs	− 11 yrs
3 →	+11 yrs	− 6 yrs
0 →	+28 yr	− 28 yrs

Calendars

Which Year immediately before 2013 had same Calender as 2013 (2002) → sol

4) 13 (3
$\quad$ 12
$\quad$ ①

2013 - 11

=) 2002

Rem	After	Before
1 →	+6 yrs	— 11 yrs
2 →	+11 yrs	— 11 yrs
3 →	+11 yrs	— 6 yrs
0 →	+28 yr	— 28 yrs

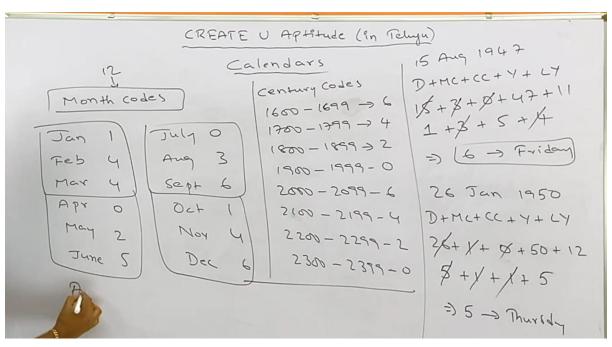## CREATE U Aptitude (in Telugu)

Calendars

15th August 1947 → Friday

26th Jan 1950 → Thursday

2nd Oct 1869 → Saturday

$$\frac{\text{Date + Month code + Century Code + Years + Leap Years}}{7}$$

=) Remainder → 1 → Sun

$\qquad$ 2 → Mon

Ans (odds) $\qquad$ 3 → Tue

$\qquad$ 4 → Wed

$\qquad$ 5 → Thu

$\qquad$ 6 → Fri

$\qquad$ 0 → Sat

CREATE U Aptitude (in Telugu)

Calendars

12
↓

Month codes

Jan	1	July	0
Feb	4	Aug	3
Mar	4	Sept	6
Apr	0	Oct	1
May	2	Nov	4
June	5	Dec	6

Century Codes

1600 – 1699 → 6
1700 – 1799 → 4
1800 – 1899 → 2
1900 – 1999 – 0
2000 – 2099 – 6
2100 – 2199 – 4
2200 – 2299 – 2
2300 – 2399 – 0

15 Aug 1947

$D + MC + CC + Y + LY$

$1\cancel{5} + \cancel{3} + \cancel{0} + 47 + 11$

$1 + \cancel{3} + 5 + \cancel{4}$

⇒ 6 → Friday

26 Jan 1950

$D + MC + CC + Y + LY$

$2\cancel{6} + \cancel{1} + \cancel{0} + 50 + 12$

$\cancel{8} + \cancel{1} + \cancel{1} + 5$

⇒ 5 → Thursday

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21 Feb 2024

$D + MC + CC + Y + LY$

$21 + 4 + 6 + 24 + 5$

Jan a Feb 29 (incl 29)

−1

29 Feb 1960

D + MC + CC + Y + LY

$\cancel{29} + \cancel{4} + \emptyset + \cancel{60} + \cancel{14}$

$1 + 4 + 4 + 0$

$\Rightarrow 9 \Rightarrow \boxed{2 = \underline{Mon}}$

$4) \overline{60} (15 - 1$
$\quad\; 60$
$\quad\; \overline{(0)} \qquad \Rightarrow 14$

CREATE U Aptitude (in Telugu)

Calendars

12
↓
Month codes

Jan	1
Feb	4
Mar	4

Apr	0
May	2
June	5

July	0
Aug	3
Sept	6

Oct	1
Nov	4
Dec	6

Century Codes
1600 – 1699 → 6
1700 – 1799 → 4
1800 – 1899 ⇒ 2
1900 – 1999 – 0
2000 – 2099 – 6
2100 – 2199 – 4
2200 – 2299 – 2
2300 – 2399 – 0

Ans codes → 1 - Sun ; 2 - Mon ; 3 - Tue
4 - Wed ; 5 - Thu ; 6 - Fri

0 — Saturday

On which dates in March
1842 , Tuesdays Fall ?

1 st March 1842

D + MC + CC + Y + LY

$\cancel{1} + \cancel{4} + \cancel{2} + \cancel{42} + \cancel{10}$

$\boxed{3 \rightarrow Tuesday}$

March 1842

$\boxed{1}$ — Tuesday
8
15   1, 8, 15, 22, 29
22
$\boxed{29}$

On which dates in Dec
2022, Mondays Fall?

$$1 \text{ Dec } 2022$$

$$D + MC + CC + Y + L^y$$

$$\cancel{1} + \cancel{6} + 6 + \cancel{22} + 5$$

$$\cancel{6} + \cancel{1} + 5$$

$$5 \Rightarrow \text{Thursday}$$

1 Dec 2022 - Thur
2 " " - Fri
3 " " - Sat
4 " " - Sun
5 Dec 2022 - Mon

$$5, 12, 19, 26 \text{ Monday}$$

(chuyu)

On what Dates in
Sept 2456,
Wednesdays fall?

$\boxed{1 \text{ Sep } 2456}$

D + MC + CC + Y + LY

$\cancel{1} + \cancel{6} + 6 + \cancel{56} + \cancel{14}$

$\underline{6 \rightarrow \text{Friday}}$

1 Sep 2456 – Fri
2 "   "   – Sat
3 "   " $\rightarrow$ Sun
4 "   " $\rightarrow$ Mon
5 "   " $\rightarrow$ Tue
6 Sep 2456 – Wed

6, 13, 20, 27