26/05.

# Calender Aptitude

normal year
↓
12 months
↓
52 weeks
↓
365 days

364 days
↑
365/7 = 52 + 1 day
↓
week.

1st January → 31st december → Normal year
↓ ↓
wednesday ??

wed - Tuesday, wed - Tuesday ... wed - Tuesday + 1 → wednesday
1st week, 2nd week, 52nd week

start at same day
end at same day

31st december
↓
wednesday

leap year

wed - Tue, wed - Tue .... wed - Tue + 2 → thursday
1st week, 2nd week, 366 52nd week

Start - wednesday

End - thursday

How to find leap year ⇒ divide by 4 (or) divide by 400
(or) Divide by 100.

does a leap year come after every 4 years?

NO

1896 → 1900 → 1904

leap — not leap — leap

leap year → 365 day + 6 hours.

↓

5 hours + 48 minutes + 46 seconds

How many leap years in 100 years?

(1–100) ÷ 4 ⇒ 25 leap

75 (Non leap) } wrong.

100 is not a leap year.

80 – 24 leap years

76 non-leap years.

| | L.Y | N.L.Y |
|---|---|---|
| 100 | 24 | 76 |
| 200 | 48 | 152 |
| 300 | 72 | 228 |
| 400 | 97 | 303. |

1–400 years → 97 leap years

303 normal years.

Odd days – 1 week + 3 days.

↓

odd days.

January (31 days) – 4 weeks + 3 days

odd days.

no. of odd days in century = 24×2 + 76 ⇒ 48 + 76.

= 124/7 ⇒ 17 weeks + 5 days.

odd days.

| no. of years | Leap year | Normal | odd days. |
|---|---|---|---|
| 100 | 24 | 76 | 5 |
| 200 | 48 | 152 | 3 |
| 300 | 72 | 228 | 1 |
| 400 | 97 | 303 | 0 |

Same will repeat for next 4 years.

what was the day on 6th April 1896?

1600 + 200 + 96

0 days odd

3 odd days

23 LP → 46

72 normal → 72

Jan 1896 → 31

Feb 96 → 29 (leap year 1896)

Mar 96 → 31

6 days in April → 6.

0+3+46+72

= 121 days/7

= 17 weeks + 2 odd days.

= 31+29+31+6

= 97/7 ⇒ 13 weeks + 6 odd days,

= 2+6 (odd days)

= 8/7 ⇒ 1 odd day

⇓

Monday

(1st Olympic in Athens)

0 - sunday
1 - monday
2 - tue
3 - wed
4 - thurs
5 - friday
6 - saturday.

25th June 1983

1600 + 300 + 82 | 4 | 82

0 | 1 | 20 leap | 62 Normal

40 odd days | 62

= 0 + 1 + 40 + 62

= 103/7

= 14 weeks + 5 (odd days)

14
7 | 103
7
33
28
5

Jan 83 | feb 83 | march 83

31 | 28 | 31

April 83 | may 83 | Jun 25 83.

30 | 31 | 25

= 31 + 28 + 31 + 30 + 31 + 25

= 176 days / 7

= 25 weeks + 1 odd day

= 5 + 1 (odd day)

= 6 (saturday)

Jan 1, 2001 was monday, what was the day on dec 31, 2002

Jan 1, 2001 - monday

dec 31, 2001 - monday.

Jan 1, 2002 - Tuesday

dec 31, 2002 - Tuesday

⇓

Q) calender for 2007 will be as same as calender for which nearest year in future?

| year | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| odd days | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 |

= 1 + 2 + 1 + 1 + 1 + 2 + 1 + 1 + 1 + 2 + 1 + 1.

= 14/7 ⇒ 0.

2007 2018

1st - Jan 1st - Jan

31st-december 31st - december

1) which day can't be the last day of the century?

| no. of odd days | day | no. of year | odd days | |
|---|---|---|---|---|
| 0 | | 100 | 5 → friday | Tue |
| 1 | | 200 | 3 → wed | Thurs |
| 2 | | | | |
| 3 | | 300 | 1 - mon | saturday |
| 4 | | 400 | 0 - sun | |
| 5 | | | | |
| 6 | | | | |

15th Jan 1977 was Saturday. what was the day of the week 15th Jan 1976/1976.

15th Jan 1977 → Saturday → 6

15th Jan 1976 (leap year) → 6-2 r=4 → Thursday

calender for the month for april look same as that for the month of

| April | may | June | July |
|---|---|---|---|
| 30 | 31 | 30 | — |

30+31+30 ⇒ 91/7

April = July

=0.