



Mahendra's



SSC CGL/CPO/CHSL

1st



REASONING

CALENDAR

PART-2



LIVE

07:30 PM

ODD DAYS IN A BUNTCH OF DAY

EXAMPLE HOW MANY ODD DAY IN 2034 DAYS ?

ANS =

(Day)

(month)

(Year)

①

$$\begin{array}{r} 7 \overline{) 2034} \left(\begin{array}{l} 290 \\ \hline 63 \\ 63 \\ \hline 22 \end{array} \right) \end{array}$$

4 odd day 100

L C S

Q11. HOW MANY ODD DAYS WILL BE IN X WEEKS AND Y DAY. IF X IS EVEN NO AND Y IS ODD NO ? X सप्ताह और Y दिन में कितने विषम दिन होंगे। यदि X सम संख्या है और Y विषम संख्या है

1. $Y/7$ ODD DAY
2. $X + Y$ ODD DAY
3. NONE OF THESE
- ④ Y ODD DAY ✓

$\left. \begin{array}{l} x \rightarrow \text{even} \\ y \rightarrow \text{odd} \end{array} \right\}$

$4 \rightarrow 0$
 $x \rightarrow 0$
 $x \text{ w}$ $y \text{ D}$

1 week $\rightarrow 0$
 $2 \rightarrow 0$

$x(w) + y$ ~~day~~
 \downarrow
 $0 + y$
 $y \text{ odd}$

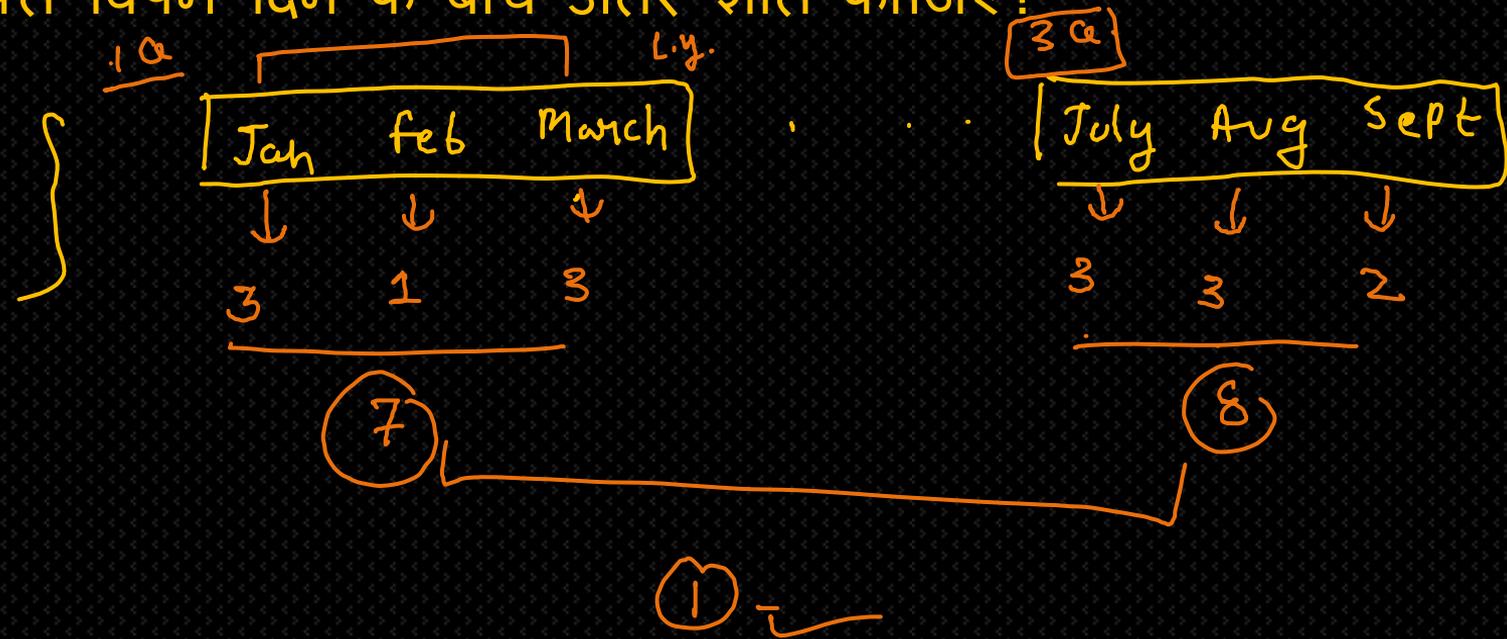
ODD DAYS IN MONTHS महीनों में विषम दिन

| MONTH TYPE | ODD DAYS |
|---|----------|
| 31 (JAN, MAR, MAY, JULY, AUG, OCT, DEC) | 3 |
| 30 (APR, JUN, SEP, NOV) | 2 |
| 29 FEB | 1 |
| 28 FEB | 0 |
| | |

Q12. FIND THE DIFFERENCE BETWEEN COMBINED ODD DAY OF FIRST QUARTER OF LEAP YEAR TO COMBINED ODD DAY OF THIRD QUARTER OF SIMPLE YEAR ?

लीप वर्ष की पहली तिमाही के संयुक्त विषम दिन और साधारण वर्ष की तीसरी तिमाही के संयुक्त विषम दिन के बीच अंतर ज्ञात कीजिए?

- 1. 1 ODD DAY
- 2. 5 ODD DAY
- 3. 6 ODD DAY
- 4. 0 ODD DAY



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ODD DAYS IN A YEAR

एक वर्ष में विषम दिन

NORMAL YEAR = 1 ODD DAY

LEAP YEAR = 2 ODD DAY

$$\begin{array}{r} 365 \rightarrow (1) \\ \hline 7 \quad (1) \end{array}$$

$$\begin{array}{r} (366) \rightarrow (2) \\ \hline 7 \end{array}$$

ODD DAYS IN A CENTURY

एक शताब्दी में विषम दिन

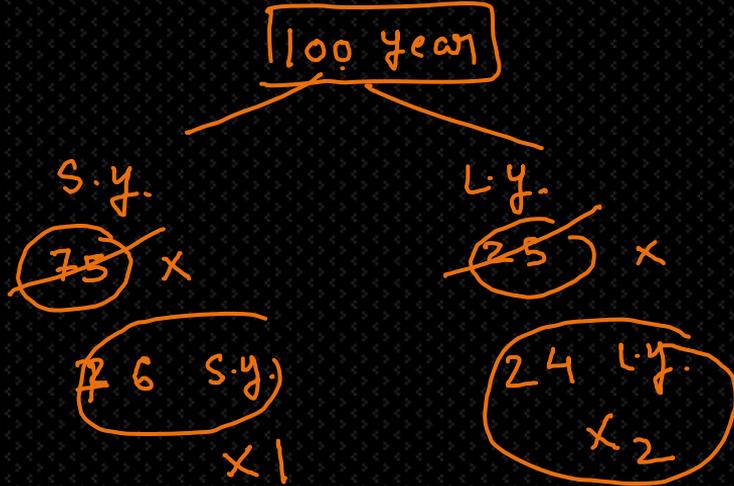
$$\underline{15.y} = 1 \text{ odd day}$$

$$\underline{1L.y} = 2 \text{ odd day}$$

$100 \rightarrow 25L.y.$ HOW MANY ODD DAYS IN 100 YEARS

$100 \rightarrow 5 \text{ odd}$

every 4 years



$$76 \times 1 + 24 \times 2 =$$

$$\begin{array}{r} 7 \overline{) 124} \\ \underline{- 7} \\ 54 \\ \underline{- 49} \\ 5 \\ \underline{- 5} \\ 0 \end{array}$$

$76 + 48 = 124$

CONDITION OF LEAP YEAR

लीप वर्ष की शर्त

$$\Rightarrow \left\{ \frac{\text{simple year}}{4} \right\}$$

but $\frac{\text{century year}}{400}$

$$\frac{\textcircled{100} \text{ वा } \textcircled{x}}{\textcircled{x}}$$

$$\frac{\textcircled{1988}}{4} = \checkmark$$

$$\frac{\textcircled{1973}}{4} = x$$

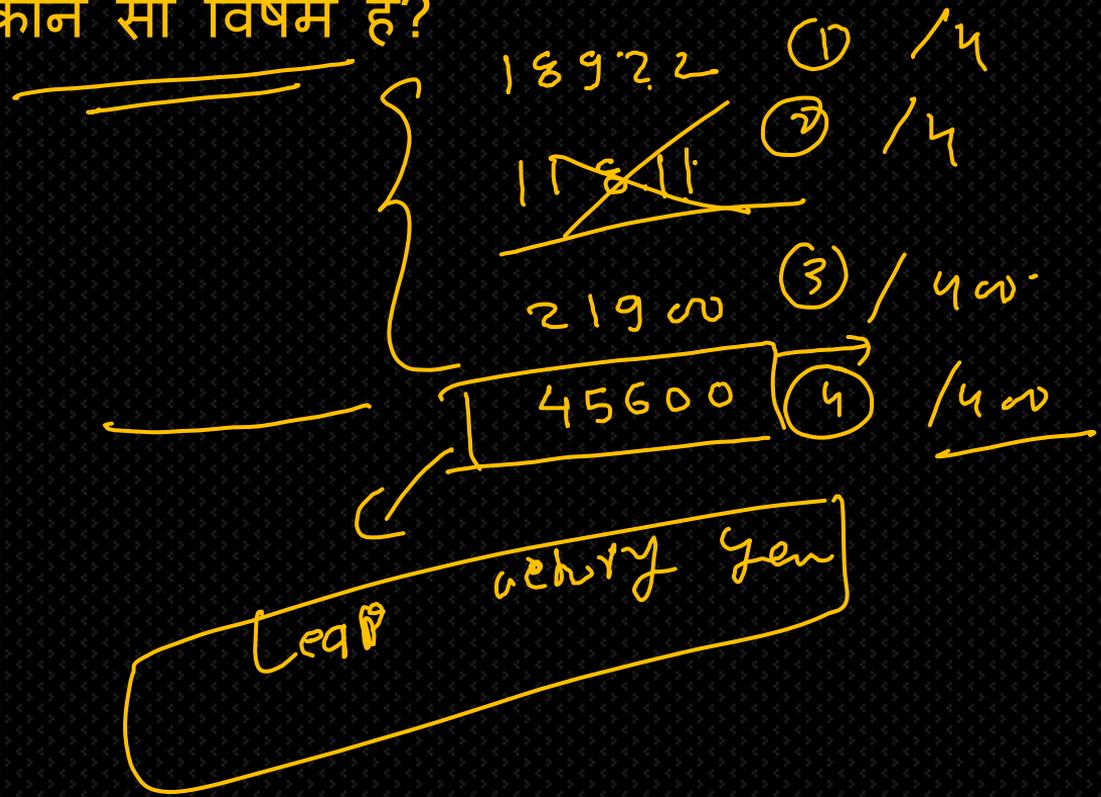
$$\frac{100}{400} = x$$

$$\frac{800}{400} = \checkmark$$

Q13. WHICH ONE IS ODD? कौन सा विषम है?

- 1. 18922 YEAR
- 2. 11800 YEAR
- 3. 21900 YEAR
- 4. 45600 YEAR

century
century
century



21900
100

DRIVED FORMULA TO CALCULATE ODD DAYS

विषम दिनों की गणना करने के लिए सूत्र

odd

$$\begin{array}{r}
 4 \overline{) 78} \quad (19 \\
 \underline{- 4} \\
 38 \\
 \underline{- 36} \\
 2
 \end{array}$$

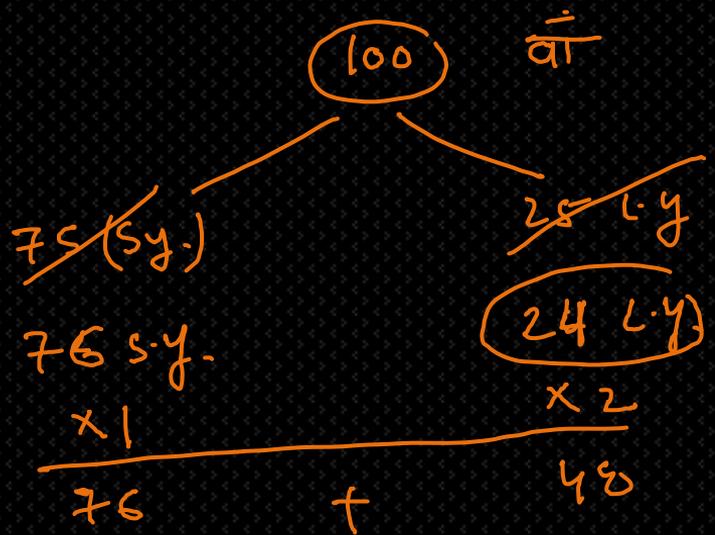
ODD DAY IN BUNTCH OF YEARS = TOTAL YEARS + LEAP YEAR

वर्षों के समूह में विषम दिन = कुल वर्ष + लीप वर्ष

$$\left. \begin{array}{l} 100 \\ 78 \text{ years} \end{array} \right\} = 100 + 24 = 124 \Rightarrow 5 \\
 = 78 + 19 = 97 \Rightarrow 6$$

$$87 \text{ years} = 87 + 21 = 3 + 0 = 3 \text{ odd day}$$

$\downarrow \quad \downarrow$
 $3 \quad 0$



(1 S.y.) = 1

(1 L.y.) = 2

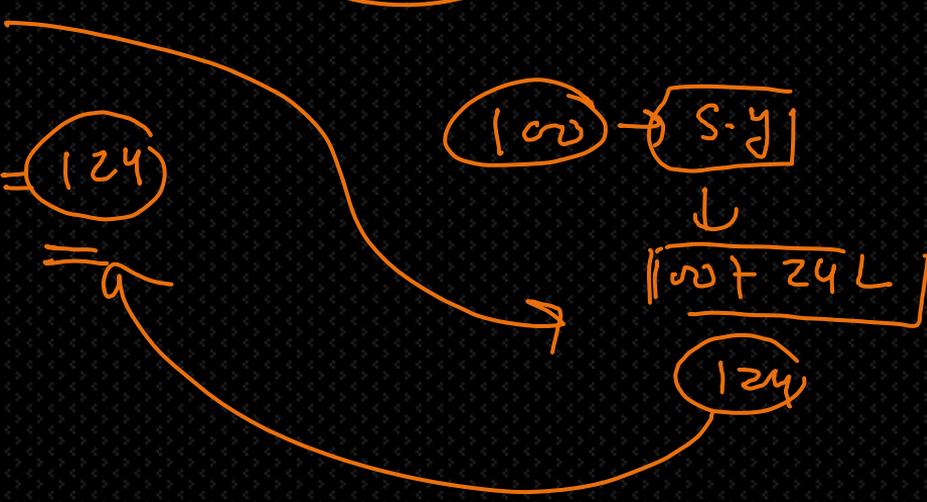
(24 L.y.)

= (124)

(100) → [S.y.]

↓
 [100 + 24 L]

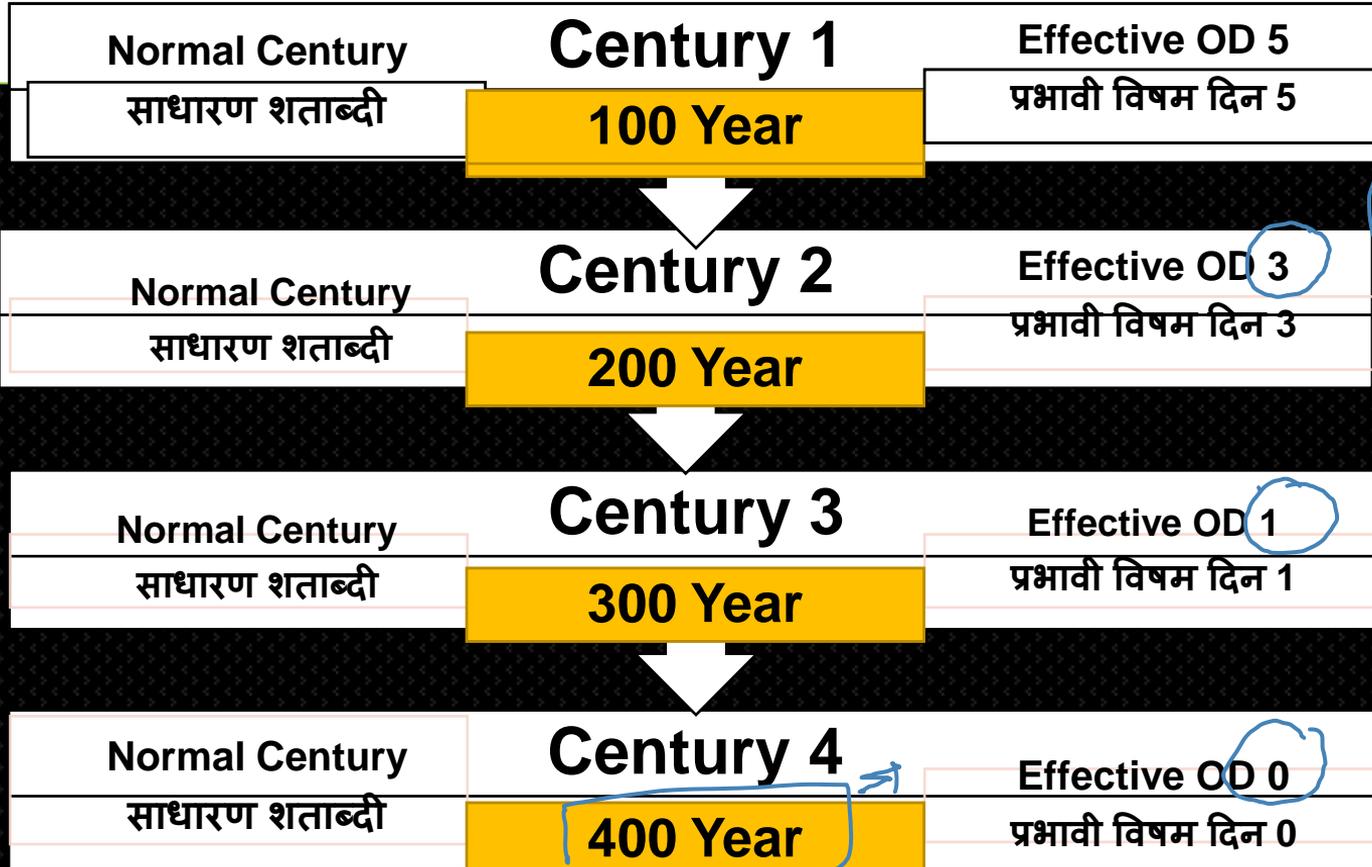
(124)



$$\frac{20 + 1}{21} \rightarrow 0$$

ODD DAYS IN A SET OF 4 CENTURIES

प्रत्येक चार शताब्दी में विषम दिन



$$100 = 5$$
$$200 = 10$$

$$300 = 15$$

$$400 = 20$$

100 → 5

200 → 3

300 → 1

400 → 0

1300 → (5) odd day

1200 + 100 →
↓ ↓
0 5

800 → 0

(5) odd day

1400

1200

+ 200

0 + 3

1200 → 0

8700

↓

8400 + 300

0 + 1 = (1)

Q14. HOW MANY MONTHS OF 29 DAYS IN 400 YEAR? 400 साल में 29 दिनों
के कितने महीने होते हैं?

- 1. 4496 MONTHS
- 2. 97 MONTHS ✓
- 3. 4498 MONTHS ✓
- 4. ~~NONE OF THESE~~ ✓

14

(Feb) →

1 year = 11 month. → (29) (97) ✓

$$\begin{aligned} 400 &= 400 \times 11 = 4400 \\ &= \begin{array}{r} 4400 \\ + 97 \\ \hline 4497 \end{array} \end{aligned}$$

Q15. HOW MANY MONTHS OF 29TH FEB IN 400 YEAR? 400 साल में 29 दिनों के कितने ^(Feb) महीने होते हैं?

1. 4496 MONTHS
2. 97 MONTHS ✓
3. 4498 MONTHS
4. NONE OF THESE

Leap year
29 Feb → (24 बार)

(29) Feb

1st 100 year → 24 L.Y. (Feb)

2nd 100 year → 24 L.Y. (Feb)

3rd 100 year → 24 (Feb)

4th 100 year. → 25 (Feb)

(97) Feb.

Q16. HOW MANY ODD DAYS IN 4300 YEAR? 4300 वर्ष में कितने विषम दिन होते हैं?

1. 2 ODD DAY
2. 3 ODD DAY
3. 4 ODD DAY
4. NONE OF THESE ✓

$$\begin{array}{r} \textcircled{4300} \rightarrow \\ 4000 + \frac{300}{\textcircled{10}} \end{array}$$

Q17. HOW MANY ODD DAYS IN 87 YEAR? 87 वर्ष में कितने विषम दिन होते हैं?

1. 2 ODD DAY
2. 3 ODD DAY
3. 4 ODD DAY
4. NONE OF THESE

$$= \underbrace{87}_{\downarrow} + \cancel{31}^0$$

$$\begin{array}{r} 7 \overline{) 87} \quad (12 \\ \underline{- 7} \\ 17 \\ \underline{- 14} \\ \textcircled{3} \end{array}$$

3 odd day

Q23. IF 2 days before yesterday was Friday then what will be 4 days after tomorrow ? यदि बीते हुए कल से 2 दिन पहले शक्रवार था तो आने वाला कल के 4 दिन बाद क्या होगा?

1. MONDAY
2. WEDNESDAY
3. SUNDAY
4. NONE OF THESE

$$2 + 1 + 1 + 4$$

8 ✓
10

35 sec +1

