

EXERCISE

1. What was the day of week on 19th June 1440?
(a) Thursday (b) Wednesday
(c) Friday (d) Saturday
2. What was the day of week on 2nd October 1869?
(a) Friday (b) Saturday
(c) Sunday (d) Monday
3. What was the day of week on 26th November 2008?
(a) Tuesday (b) Monday
(c) Thursday (d) Wednesday
4. On what dates of May 1993 did Sunday fall?
(a) 1, 8, 15, 22, 29
(b) 2, 9, 16, 23, 30
(c) 3, 10, 17, 24, 31
(d) 4, 11, 18, 25
5. On what dates of March, 2013 did Wednesday fall?
(a) 6, 13, 20, 27
(b) 5, 12, 19, 26
(c) 4, 11, 18, 25
(d) 7, 14, 21, 28
6. If the 3rd day of a month is Tuesday, which of the following will be the 6th day from 23rd of that month?
(a) Sunday (b) Saturday
(c) Thursday (d) Friday
7. If the 27th day of a month is Friday, which of the following will be the 4th day of that month?
(a) Sunday (b) Saturday
(c) Wednesday (d) Friday
8. 1.11.93 is First Monday. Which is the 4th Friday of November 1993?
(a) 26-11-93 (b) 24-11-93
(c) 25-11-93 (d) 27-11-93
9. If the 6th day of Month is three days earlier then Saturday, what day will it be on 21st day of the month
(a) Tuesday (b) Wednesday
(c) Monday (d) Thursday
10. If Friday fall on 15th sep 1992, what will be the day of 26 Dec 1992?
(a) Tuesday (b) Monday
(c) Thursday (d) Wednesday
11. If Friday fall on 26 January, 1904, What will be the day of 9 June 1904?
(a) Friday (b) Saturday
(c) Sunday (d) Monday
12. If Tuesday fall on 19 July 2019, what will be the day of 16 Feb, 2019?
(a) Tuesday (b) Wednesday
(c) Thursday (d) Monday
13. It was Saturday on 12 December, 1342. What was the day of week on 24 August 1342?
(a) Tuesday (b) Monday
(c) Sunday (d) Friday
14. If two days before yesterday was Sunday. What day will be 3 days after tomorrow?
(a) Saturday (b) Monday
(c) Sunday (d) Tuesday
15. If 26 March falls 3 days after tomorrow, that is Tuesday, on what day will the 8th of the month fall?
(a) Sunday (b) Friday
(c) Tuesday (d) Wednesday
16. Ravi remembers that his mother's birthday is between thirteenth and nineteenth April. His Brother remembers that their mothers birthday is between seventeenth and 23rd April. If both of them remember correctly and on which day is their mothers birth day?
(a) 17th (b) 18th
(c) 17th or 18th (d) 19th
17. Sunday falls on 4th May, 1886 what will be the day on 4th may, 1887?
(a) Monday (b) Tuesday
(c) Thursday (d) Saturday
18. Thursday falls on 16th April 1671, what will be the day on 16th April 1675?
(a) Monday (b) Tuesday
(c) Wednesday (d) Friday
19. Saturday falls on 9th Sep. 2011, what was the day of week on 9th Sep. 2007?
(a) Sunday (b) Saturday
(c) Monday (d) Tuesday
20. It was Wednesday on 6th March 1949. What was the day of week on 7th March 1952?
(a) Sunday (b) Monday
(c) Tuesday (d) Wednesday
21. The calendar of 1971 used just after in the year?
(a) 1977 (b) 1981
(c) 1976 (d) 1982
22. In which year the calendar of 2011 will be used again?
(a) 2017 (b) 2018
(c) 2020 (d) 2022
23. Mr. Ravi and Priyanka celebrated their anniversary on Friday, 4 February 2005. When would they celebrate their next anniversary on the same day
(a) 2009 (b) 2011
(c) 2015 (d) 2010
24. Manoj celebrated his birthday on Saturday, 7th March, 2004. When will he celebrate his next birthday on same day?
(a) 2009 (b) 2010
(c) 2011 (d) 2012
25. In the year 1966, the republic day was celebrated on Sunday, when will it celebrated again on Sunday
(a) 1972 (b) 1982
(c) 1977 (d) 1971
26. In the year 1979 X-mas day was celebrated on Tuesday. When will it be celebrated on same day?
(a) 1985 (b) 1984
(c) 1990 (d) 1986
27. How many Leap Years in 800 years?
(a) 200 (b) 202
(c) 194 (d) 197
28. Sonu's brother Monu 536 days older to him while his sister Tonu 75 weeks older to Monu. If Tonu was born on Wednesday, on which day was Sonu born?
(a) Saturday (b) Sunday
(c) Friday (d) Monday
29. I shall go Mumbai after 129 days of my brothers birthday. If my brother birth day falls 3 days earlier to Sunday. When shall I go to Mumbai?
(a) Saturday (b) Sunday
(c) Tuesday (d) Wednesday
30. Which of the following is odd?
(a) April (b) July
(c) November (d) March

EXERCISE

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|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|
| 1. (c) | 4. (b) | 7. (c) | 10. (a) | 13. (b) | 16. (b) | 19. (c) | 22. (c) | 25. (a) | 28. (b) |
| 2. (b) | 5. (a) | 8. (a) | 11. (c) | 14. (c) | 17. (a) | 20. (b) | 23. (b) | 26. (b) | 29. (b) |
| 3. (c) | 6. (b) | 9. (c) | 12. (b) | 15. (b) | 18. (b) | 21. (c) | 24. (b) | 27. (c) | 30. (a) |

SOLUTION

1. (c) Total number of odd days till 19th June 1440

$$\begin{array}{ccccccc}
 1200 \text{ year} & + & 200 \text{ year} & + & 39 \text{ year} & + & \text{Jan} = 3 + 19 \text{ days} \\
 \downarrow & & \downarrow & & \downarrow & & \downarrow \\
 0 & & 3 & & 6 & & 5 \\
 & & & & & & \text{Feb} = 1 \\
 & & & & & & \text{March} = 3 \\
 & & & & & & \text{April} = 2 \\
 & & & & & & \text{May} = 3
 \end{array}$$

$$\begin{aligned}
 \text{Leap year in 39 year} &= \frac{39}{4} \\
 &= (9) \text{ quotient}
 \end{aligned}$$

$$\text{Odd days in 39 year} = \frac{39+9}{7}$$

$$= \frac{48}{7} = 6 \text{ (Remainder)}$$

$$\begin{aligned}
 \text{Now odd day } \downarrow & 0 + 3 + 6 + 3 + 1 \\
 & + 3 + 2 + 3 + 5 = 26
 \end{aligned}$$

$$\frac{26}{7} = 5 \text{ (Remainder)}$$

5 odd days for \downarrow **Friday**

2. (b) Total number of odd days till 20 Oct 1869

$$\begin{array}{ccccccc}
 \text{Year} & \text{Year} & \text{Year} & \text{Month} & \text{days} \\
 1600 & + & 200 & + & 68 & + & \text{Jan} = 3 + 2 \\
 \downarrow & & \downarrow & & \downarrow & & \downarrow \\
 0 & & 3 & & 1 & & 2 \\
 & & & & & & \text{Feb} = 0 \\
 & & & & & & \text{March} = 3 \\
 & & & & & & \text{April} = 2 \\
 & & & & & & \text{May} = 3 \\
 & & & & & & \text{June} = 2 \\
 & & & & & & \text{July} = 3 \\
 & & & & & & \text{August} = 3 \\
 & & & & & & \text{September} = 2
 \end{array}$$

$$\begin{aligned}
 \text{Total E.D.} &= 0 + 3 + 1 + 3 + 0 + 3 \\
 &+ 2 + 3 + 2 + 3 + 3 + 2 + 2 = 27
 \end{aligned}$$

But = (27) can never be odd days

$$\frac{27}{7} = 6 \text{ (Remainder)}$$

odd days 6 for \downarrow **Saturday**

3. (d) $\frac{26+4+8+6+2}{7}$ Remainder

$$= 4$$

0 = Saturday, 1 = Sunday

2 = Monday, 4 = Wednesday

4. (b) For Sunday in May, 1993 we should find the day on 1st May,

1993

Total odd days till 1st May 1993

$$\begin{array}{ccccccc}
 \text{Year} & \text{Year} & \text{Year} & \text{Month} & \text{days} \\
 1600 & + & 300 & + & 92 & + & \text{Jan} = 3 \\
 \downarrow & & \downarrow & & \downarrow & & \downarrow \\
 0 & & 1 & & 3 & & 1 \\
 & & & & & & \text{Feb} = 0 \\
 & & & & & & \text{March} = 3 \\
 & & & & & & \text{April} = 2
 \end{array}$$

$$\begin{aligned}
 \text{Total odd days} &= 0 + 1 + 3 + 3 + 0 \\
 &+ 3 + 2 + 1 = 13
 \end{aligned}$$

13 can never be odd days, Hence again divide by 7 and find Remainder as odd days.

$$\frac{13}{7} = 6 \text{ (odd days)}$$

$$\text{Odd days on 1st May} = 1993 = 6$$

6 for = Saturday

Than 1 May = Saturday

2 May = Sunday

3 May = Monday

First Sunday of this month is on 2nd day. Then on 2nd, 9th, 16th, 23th, 30th all are Sunday.

5. (a) We should find the day on 1st March 2013 for Wednesday in this March, 2013.

Total odd days till 1st March, 2013

$$\begin{array}{ccccccc}
 \text{Year} & + & \text{Year} & + & \text{Month} & + & \text{days} \\
 2000 & + & 12 & + & \text{Jan} = 3 & + & 1 \\
 \downarrow & & \downarrow & & \downarrow & & \downarrow \\
 0 & & 1 & & 0 & & 1 \\
 & & & & & & \text{Feb} = 0
 \end{array}$$

$$\begin{aligned}
 \text{Total odd days} &= 0 + 1 + 3 + 0 + 1 \\
 &= 5
 \end{aligned}$$

5 Odd day for = Friday

1st March 2013 = Friday

2nd March 2013 = Saturday

3rd March = Sunday

4th March = Monday

5th March = Tuesday

6th March = Wednesday

Then Wednesday in March 2013/ = **6th, 13th, 20th, 27th**

6. (b) 3rd day = Tuesday

When was start from 23rd, then the 6th day of the month will be 28th days of the same month

3rd day = Tuesday, Then on 10th, 17th, 24th = Tuesday

24th = Tuesday

25th = Wednesday

26th = Thursday

27th = Friday

28th = **Saturday**

7. (c) 27th day of Month = Friday
Similarly 20th, 13th, 6th also are Friday

6th day = Friday

5th day = Thursday

4th day = **Wednesday**

8. (a) According to question, 1st November = Monday

2nd November = Tuesday

3rd November = Wednesday

4th November = Thursday

5th November = Friday

Similarly 12th, 19th, 26th all are Friday

Then 4th Friday = 26th **November**

9. (d) According to question 6th + 3 = 9th = Saturday

Then 16th is also Saturday

16th + 5th = 21st day

Saturday + 5 = **Thursday**

10. (a) Total Number of days from 15th September 1992 to 26 December 1992

Days left in September = 15

October = 31

November = 30

December = 26

Total = 15 + 31 + 30 + 26 = 102 days

$$\text{Odd days in 102 days} = \frac{102}{7} = 4$$

(Remainder)

↳ add 4 days in the given day of 15th September because we are going forward Friday

+ 4 = **Tuesday**

11. (c) Total number of days from 26th January, 1904 to 9th June 1904

Days left in January

February = 29 (because 1904 is L.Y)

March = 31

April = 30

May = 31

June = 9

Total days = 5 + 29 + 31 + 30 + 3 + 9 = 135

Odd days in 135 days = $\frac{135}{7}$

= 2 (Remainder)

Add 2 days in given day of 26th January 1904, Because we are going forward.

Friday + 2 = **Sunday**

12. (b) Total number of days from 16th February, 2019 to 19th July 2019

Days left in February = 12 (because 2019 is a G.Y.)

March = 31

April = 30

May = 31

June = 30

July = 19

Total days = 12 + 31 + 30 + 31 + 30 + 19 = 153.

Odd days in 153 days = $\frac{153}{7} = 6$

(Remainder)

Subtract 6 days from the given day of 19th July 2019, Because we are going Backward from July to February

Tuesday - 6 = **Wednesday**

13. (b) Total number of days from 24th August 1342 to 12th December 1342

Left days in August = 7

September = 30

October = 31

November = 30

December = 12

Total days = 7 + 30 + 31 + 30 + 12 = 110

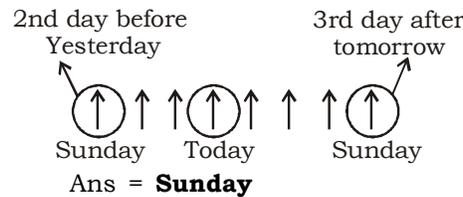
In 110 days total odd days = $\frac{110}{7} = 5$ (Remainder)

Subtract 5 days from the given day of 12th December, 1342,

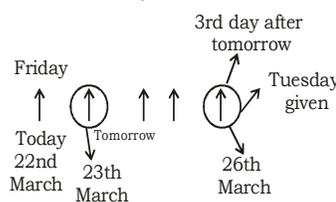
Because we are going backward from December to August.

Saturday - 5 = **Monday**

14. (c)



15. (b)



Then 15th and **8th day** are also on Friday.

16. (b) According to Ravi his mother's birthday can be on = 14, 15, 16, 17th, 18

but according to his brother birthday can be on

= 18th, 19th, 20th, 21st, 22nd

Because Both are correct hence 18th is common Birthday is on **18th April**

17. (a) According to Rule

4th May, 1886 to 4th May 1987, we forward 1 day.

Rule = Date same (4th), Month same (May) and we cross a G.Y. (28th Feb of 1987) then we forward 1 day.

Sunday + 1 = **Monday**

18. (b) 16th April 1671 } 2
 16th April 1672 } 1
 16th April 1673 } 1
 16th April 1674 } 1
 16th April 1675 } 1

Total days = 5

Thursday + 5 = **Tuesday**

19. (c) 9th September 2007 } 2
 9th September 2008 } 1
 9th September 2009 } 1
 9th September 2010 } 1
 9th September 2011 } 1

Total days = 5

We subtract these 5 days from the given day of 9th September 2011. Because we are going backward from 2011 to 2007.

Saturday - 5 = **Monday**

20. (b) 6th March 1949 } 1
 6th March 1950 } 1
 6th March 1951 } 1
 6th March 1952 } 2
 7th March 1952 } 1

Total days = 5

Add These five days in the given day of 6th March 1949. Because we are going forward from 1949 to 1952.

Wednesday + 5 = **Monday**

21. (d) According to Rule
 L.Y. + 3 = 1968 + 3 = 1971
 Add 11 year in 1971
 1971 + 11 = **1982**
22. (d) According to Rule
 L.Y. + 3 = 2008 + 3 = 2011
 Add 11 year 2011
 2011 + 11 = **2022**
23. (b) According to chart this date is till 28th February and in year (L.Y. + 1) we add 6 year.
 2005 + 6 = **2011**
24. (b) According to Rule, this birthday is after 28 February and in a Leap year. We add 6 year according to the chart in 2004
 2004 + 6 = **2010**
25. (a) This Republic day is till 28 February and in a (L.Y. + 2) year. We add 6 year according to chart
 1966 + 6 = 1972]
26. (b) This X-mas day was after 28th February and in the year (L.Y. + 3)
 (1976 + 3) = 1979
 We add 5 year According to chart 1979 + 5 = **1984**
27. (c) L.Y in 400 year = 97
 Then in 800 year = 97 × 2 = **194**
28. (a) According to the question Sonu is the youngest and Tonu is the oldest. So Tonu was born before Sonu and Monu.
 Suppose Sonu was born on = x day
 Then Monu was born on = x - 536
 and Tonu was born on = x - 536 - 525 (75 weeks = 525 days)
 x - 1061 = Wednesday (given)
 Odd days in 1061 days = 1061 ÷ 7 = 4 (remainder)
 and code of Wednesday = 3
 x - 4 = 3; x = 7 means 0 means Sunday
 So, Sonu was born on = x = 0 = **Sunday**
29. (b) 3 days earlier to Sunday
 Sunday - 3 = Thursday
 Brother's birthday was on = Thursday
 I Shall go Mumbai = 129 days
 E.D. in 129 days = $\frac{129}{7} = 3$ days
 Add These 3 days in brother's

day of birth.

Thursday + 3 = **Sunday**

30. (a) Because the month April is on even place. Others are on odd place.