## MODULE 2: CALENDAR

## CALENDAR QUESTIONS WITH ANSWERS:

Question: 1

**A clock takes 9 seconds to strike 4 times. In order to strike 12 timesat the same rate, the time taken is**

(A) 27 seconds

(B) 29 seconds

(C) 33 seconds

(D) 36 seconds

**Ans: C**

There are 3 intervals when the clock strikes 4

Time taken in 3 intervals = 9 seconds

∴ Time taken for 1 interval = 3 seconds

In order to strike 12, there are 11 intervals,

for which the time taken is 11 x 3 seconds = 33 seconds.

Question: 2

**Number of times $29^{th}$ day of the month occurs in 400 consecutive year is**

(A) 4400

(B) 4497

(C) 4800

(D) 4600

**Ans: B**

400 consecutive years contain 97 leap years.

∴ In 400 consecutive years February has 29 days 97 times and the remaining 11 months have 29th day 400 x 11 = 4400 times

∴ 29th day of the month occurs 4400 + 97 = 4497 times.

Question: 3

**Monday falls on 20$^{th}$ March, 1995. What was the day of 3$^{rd}$ November, 1994?**

(A) Sunday

(B) Tuesday

(C) Thursday

(D) Friday

**Ans: C**

Number of days after 3$^{rd}$ November, 1994 will be

Nov. Dec. Jan. Feb. March

27 + 31 + 31 + 28 + 20 = 137 days ⇒ 19 weeks + 4 days

∴ Number of odd days = 4.

∴ The day on 3rd November, 1994 is (7 – 4) days beyond the day on 20th March, 1995. So, the required day is Thursday.

Question: 4

**What was the day of the week on 28$^{th}$ February, 1995?**

(A) Monday

(B) Tuesday

(C) Wednesday

**(D)** Thursday

**Ans: B**

1600 years contain 0 odd day.

300 years contain 1 odd day.

94 years = (23 leap years + 71 ordinary years)

= (46 + 71) odd days

= 117 odd days, i.e., 5odd days.

Days from 1st January 1995 to 28th February 1995

= (31 + 28) days = 59 days

= ( 8weeks + 3 days) = 3 odd days

Total number of odd days = (0 + 1 + 5 + 3) = 9 odd days

i.e., 2 odd days.

So, the required day is Tuesday.

Question: 5

**January 1, 1992 was Wednesday. What day of the week wasJanuary 1, 1993?**

(A) Monday

(B) Tuesday

(C) Thursday

(D) Friday

**Ans: D**

1992 was a leap year. Hence

it had 2 odd days.

So, the first day of the year 1993 must be two days after Wednesday.So,

it was Friday.

Question: 6

**The day on $5^{th}$ March of a year is the same day on what date of the same year?**

(A) $5^{th}$ August

(B) $5^{th}$ October

(C) $5^{th}$ November

(D) $5^{th}$ December

**Ans: C**

Since any date in March is the same day of the week as the corresponding date in November of that year, so the same day falls on $5^{th}$ November.

Question:7

**January 7, 1992 was Tuesday. Find the day of the week on thesame date after 5 years, i.e., on January 7, 1997?**

(A) Monday

(B) Tuesday

(C) Wednesday

(D) Friday

Ans: B

During the interval we have two leap years as 1992 and 1996 and it contains February of both these years.

∴, The interval has (5 + 2) = 7 odd days or 0 odd day.

Hence, January 7, 1997 was also Tuesday.

Question: 8

**My watch gains 5 minutes, in every hour. How many degrees thesecond hand moves in every minute?**

(A) 375°

(B) 380°

(C) 385°

(D) 390°

**Ans: D**

Since minute hand gains 5 minutes in every 60 minutes.

Second hand gains 5 seconds in every 60 seconds

In every 60 seconds true time, it moves 65 seconds or 65 x 6° = 390°

Question: 9

**What was the day of the week of 1$^{st}$ January 2001?**

(A) Tuesday

(B) Wednesday

(C) Friday

(D) Sunday

**Ans: D**

2000 years have 0 odd days.

1st January, 2001 will be

Sunday.

Question: 10

**May 6, 1993 was Thursday. What day of the week was on May 6,1992?**

(A) Tuesday

(B) Wednesday

(C) Friday

(D) Saturday

**Ans: A**

1992 was a leap year, so it had 2 odd days.

So, the day on May 1993 is 2 days beyond the day on M1ay 6, 1992.

But, on May 6, 1993 it was Thursday.

So, on May 6, 1992 it was Tuesday.

Question: 11

**January 1, 1995 was a Sunday. What day of the week lies onJanuary 1, 1996?**

(A) Saturday

(B) Sunday

(C) Monday

(D) Tuesday

**Ans:** C

1995 was an ordinary year, so it had 1 odd day. Hence, the first day of 1996 will be one day beyond Sunday.

It will be Monday.

Question: 12

**How often between 11 o'clock and 12 o'clock are the hands of a clock in integral number of minutes apart?**

(A) 54 times

(B) 55 times

(C) 56 times

**(D)** 58 times

**Ans: C**

At 11 O'clock, the hours hand is 4 spaces apart from the minute hand. Since there are 60 spaces in one hour, so (60 – 4) times. 56 times the hands of the clock are an integral number ofminutes apart.

Question: 13

**How many times do the hands of a clock point towards each otherin a day?**

(A) 12

(B) 20

(C) 22

(D) 24

**Ans:C**

The hands of a clock point towards each other 11 times in every 12 hours. (because between 5 and 7, at 6 O'clock only they point towards each other).

So, in a day the hands point towars each other 22 times.

Question:14

**If the first day of the year 1991 was Tuesday. What day of the weekmust have been on 1st January, 1998?**

(A) Tuesday

(B) Wednesday

(C) Thursday

(D) Friday

**Ans: C**

Total number of odd days from 1st January 1991 to 1st January, 1998 will be

| Year | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|---|---|---|---|---|---|---|---|
| Odd days | 1 | 2 | 1 | 1 | 1 | 2 | 1 |

= 9 odd days, i.e. , 2 odd days

The day is 2 days beyond the day on 1st January 1991, i.e., the required day must be Thursday.

Question: 15

**Today is Tuesday. After 62 days it will be**

(A) Monday

(B) Wednesday

(C) Thursday

(D) Sunday

**Ans: A**

62 days means (8 weeks + 6 days)

62 days have 6 odd days.

∴ Required day will be Monday.

Question: 16

**How many days will there be from 26th January, 1996 to 15th May, 1996(both days included)?**

A. 110

B. 111

C. 112

D. 113

**Ans . (B)** Number of days = (6 + 29 + 31 + 30 + 15) = 111.

Note : 1988 is a leap year. So, number of days in February = 29.

Question: 17

**If the day before yesterday was Saturday, What day will fall on the day after tomorrow?**

A. Friday

B. Tuesday

C. Thursday

D. Wednesday

**Ans: D.**

**Sol.**

If day before yesterday was Saturday, then today is Monday.

Thus tomorrow will be Tuesday and day after tomorrow will be Wednesday.

Question: 18

**If 3rd December, 1990 is Sunday, What day is 3rd January 1991?**

A. Sunday

B. Monday

C. Tuesday

D. Wednesday

**Ans:** D.

**Sol.**

Clearly, 3rd, 10th, 17th, 24th and 31st December 1990 are Sundays.

So, 1st January 1991 is Monday and 3rd January 1991 is Wednesday

Question: 19

**If the seventh day of a month is three days earlier than Friday, What day will it be on the nineteenth day of the month?**

A. Sunday

B. Tuesday

C. Wednesday

D. Monday

**Ans: A.**

**Sol.**

The seventh day of the month is three days earlier than Friday, which is Tuesday.

So, the fourteenth day is also Tuesday and thus, the nineteenth day is Sunday.

Question: 20

**If every second Saturday and all Sundays are hoildays in a 30 days month beginning on Saturday, then how many working days are there in that month?**

A. 15

B. 18

C. 23

D. 25

Ans: C.

Sol.

Since the month begins on Saturday, so 2nd, 9th, 16th, 23rd, 30th days are Sundays.

While 8th and 22nd days are second Saturdays.

Thus, there are 7 holidays in all.

Therefore number of working days = 30 – 7 = 23.

Question: 21

**If the first day of the year (other than the leap) was Friday, then which was the last of that year?**

A. Wednesday

B. Thursday

C. Friday

D. Sunday

Ans: C.

Sol.

If the year is not a leap year, then the last day of the year is the same as the first day.

Question: 22

**Today is Wednesday, What will be the day after 94 days?**

A. Monday

B. Wednesday

C. Friday

D. Sunday

Ans: B.

Sol.

Every day of the weeks is repeated after 7 days. Hence if will be Wednesday, after 94 days.

Question: 23

**If 1$^{st}$ Octomber is Sunday, then 1st November will be**

A. Wednesday

B. Friday

C. Sunday

D. Monday

**Ans:** A.

**Sol.**

Clearly, 1st, 8th, 15th, 22nd and 29th of Octomber are Sundays.

So 31st Octomber is Tuesday.

Therefore 1st November will be Wednesday.

Question: 24

**Suganya went to the movies nine days ago. She goes to the movies only on Thursday. What day of the week is today?**

A. Friday

B. Saturday

C. Tuesday

D. Thursday

**Ans:** B.

**Sol.**

Clearly, nine days ago, it was Thursday.

Therefore today is Saturday.

Question: 25

**What is the number of odd days in a leap year?**

A. 1

B. 2

C. 3

D. 4

**Ans:** B.

**Sol.**

A leap year has 366 days.

Now if we divide 366 by 7 it gives 2 as remainder.

Hence number of odd days in 366 days is 2.

Question: 26

**What is the day on 1st January 1901?**

A. Monday

B. Tuesday

C. Wednesday

D. Thursday

**Ans**: B.

**Sol.**

1st January 1901 means (1900 year and 1 day)

Now, 1600 years have 0 odd days

300 years have 1 odd day

1 day has 1 odd day

Total number of odd days = 0 + 1 + 1 = 2 days

Hence, The day of 1st January 1901 was Tuesday.

Question: 27

**Saturday was a holiday for Republic Day. 14th of the next month is again a holiday for Shivratri. What day was it on the 14th?**

A. Sunday

B. Monday

C. Tuesday

D. Thursday

**Ans**: D.

**Sol.**

As given, Satuday falls on 26th January and we have to find the day on 14th February.

Clearly, 2nd, 9th and 16th February each is a Saturday.

Thus, 14th February was a Thursday.

Question: 28

**If February 1, 1996 is wednesday, What day is March 3, 1996?**

A. Saturday

B. Tuesday

C. Wednesday

D. Monday

**Ans**: A.

**Sol.**

1996 is a leap year and so february has 29 days.

Now, 1st, 8th, 15th, 22nd and 29th February are Wednesdays.

So, 1st March is Thursday and 3rd March is Saturday.

Question: 29

**Find the day of the week on 25th december,1995?**

A. Friday

B. Saturday

C. Sunday

D. Monday

**Ans**: D.

**Sol.**

Then 149 / 7 = 23 = 2 odd days.

Therefore the required day is Monday.

Question: 30

**X was born on March 6, 1993. The same year Independence Day was celebrated on Friday. On which day was X born?**

A. Monday

B. Wednesday

C. Thursday

D. Friday

**Ans**: C.

**Sol.**

Number of days from March 6, 1993 to August 15, 1993.

Mar Apr May June July August

= 25 + 30 + 31 + 30 + 31 + 15

= 162 days = 23 weeks + 1 day.

Clearly, the day on March 6 will be the same as on August 14, i.e., Thursday.

Question: 31

**16. 1.12.91 is the first Sunday. Which is the fourth Tuesday of December 91?**

A. 17.12.91

B. 24.12.91

C. 26.12.91

D. 31.12.91

**Ans**: B.

**Sol.**

1.12.91 is the first Sunday of December 91.

So, 3.12.91 is the first Tuesday of the month.

Clearly, 10.12.91, 17.12.91, 24.12.91 and 31.12.91 are also Tuesdays.

So, 24.12.91 is the fourth Tuesday.

Question: 32

**If the day before yesterday was Thursday, when will Sunday be?**

A. Tomorow

B. Today

C. Day after tomorrow

D. Two days after today

**Ans**: A.

**Sol.**

If day before yesterday was Thursday, then today is Saturday.

Therefore, tomorrow's will be Sunday.

Question: 33

**If Thursday was the day after the day before yesterday five days ago, What is the least number of days ago when Sunday was three days before the day after tomorrow?**

A. Two

B. Three

C. Four

D. Five

**Ans**: A.

**Sol.**

Day after the day before yesterday is yesterday.

Now, five days ago, yesterday was thursday.

So, five days ago, it was Friday.

Therefore today is wednesday.

Now, three days before the day after tomorrow is yesterday.

Now, it is on Monday that we say Yesterday was Sunday.

Question: 34

**The year next to 1990 will have the same calender as that of the year 1990.**

A. 1992

B. 1995

C. 1996

D. 1998

**Ans**: C.

**Sol.**

The year 1990 has 365 days i.e. 1 odd day, year 1991 has 365 days i.e., odd day, year 1992 has 366 days i.e., 2 odd days.

Likewise year 1993, 1994, 1995 have 1 odd day each.

The sum of odd days so calculated from year 1990 to 1995

( 1 + 1 + 2 + 1 + 1 + 1 ) = 7 odd days.

Hence the year 1996 will have the same calender as that of the year 1990.

Question: 35

**If the second day of a month is a Friday, which of the following would be the last day of the next month which has 31 days?**

A. Sunday

B. Monday

C. Wednesday

D. Data inadequate

**Ans**: D.

**Sol.**

The number of days in the current month is not mentioned.

Question: 36

**If 18th February, 1997 falls on Tuesday then what will be the day on 18th February, 1999?**

A. Monday

B. Tuesday

C. Wednesday

D. Thursday

**Ans**: D.

**Sol.**

18th February, 1997 was Tuesday.

So, 18th February, 1998 was Wednesday.

Therefore, 18th February, 1999 will be Thursday.

Question: 37

**If day after tomorrow is Saturday, What day was three days before yesterday?**

A. Sunday

B. Monday

C. Tuesday

D. Friday

**Ans**: A.

**Sol.**

Day after tomorrow is Saturday.

So today is Thursday.

Thus, yesterday was Wednesday and three days before Wednesday was Sunday.

Question: 38

**Today is Thursday. The day after 59 days will be?**

A. Sunday

B. Tuesday

C. Wednesday

D. Monday

**Ans**: D.

**Sol.**

Every day of the week is repeated after 7 days.

Hence after 56 days it would be Thursday again.

And after 59 days it would be Sunday.

Question: 39

**It was Tuesday on Feb 8, 2005. What was the day of the week on Feb 8, 2004?**

A. Monday

B. Thursday

C. Friday

D. Sunday

**Ans:** D

**Sol :**

The year 2004 was a leap year. So, it had 2 odd days.

The day on Feb 8, 2004 must be 2 days before the day on Feb 8, 2005.

Hence, this day was Sunday

Question: 40

**What was the day on 28th May, 2006?**

A. Wednesday

B. Sunday

C. Saturday

D. Thursday

**Ans**:B

**Sol :**

28 May, 2006 = (2005 years + time period from 1.1.2006 to 28.5.2006)

1600 years » 0 odd days

400 years » 0 odd days

5 years = (1 leap year + 4 ordinary years) = (1 x 2 + 4 x 1) ≡ 6 odd days

Jan. Feb. March April May

(31 + 28 + 31 + 30 + 28 ) = 148 days

∴ 148 days = (1 day + 21 weeks) ≡ 1 odd day. Total number of odd days = (0 + 0 + 6 + 1) = 7 ≡ 0 odd day. So, the given day is Sunday.

Question: 41

**What was the day on June 17, 1998?**

A. Monday

B. Sunday

C. Wednesday

D. Friday

**Ans:**C

**Sol :**

June 17, 1998 = (1997 years + time period from 1.1.1998 to 17.6.1998)

1600 years » 0 odd days

300 years » (5 x 3) » 1 odd day

97 years has 73 ordinary years + 24 leap years.

Number of odd days in 97 years (73 + 24 x 2) = 121 days = 2 odd days.

Jan. Feb. March April May June

(31 + 28 + 31 + 30 + 31 + 17) = 168 days

∴168 days = 24 weeks = 0 odd days

Total number of odd days = (0 + 1 + 2 + 0) = 3

So, the given day is Wednesday.

Question: 42

**What was the day on February 9, 1979?**

A. Tuesday

B. Saturday

C. Friday

D. Thursday

**Ans:C**

**Sol :**

We know that in 1600 years, there will be 0 odd days. And in the next 300 years, there will be 1 odd day. From 1901 to 1978 we have 19 leap years and 59 non-leap years.

So, the total number of odd days up to 31st Dec. 1978 is 19 x 2 + 59 = 97. On dividing 97 by 7 we get 6 as the remainder, which is the total number of odd days in these years.

So, till 31st Dec. 1978 we have 1 + 6 = 7 odd days, which forms one complete week. Now, in 1979, we have 3 odd days in January, and 2 odd days in the month of February (up to 9th Feb). So, the total odd days are 3 + 2 = 5. Hence, 9th February 1979 was a Friday.

Question: 43

**If 10th May, 1997 was a Monday, what was the day on Oct 10, 2001?**

A. Saturday

B. Sunday

C. Thursday

D. Friday

**Ans:D**

**Sol :**

In this question, the reference point is May 10, 1997 and we need to find the number of odd days from May 10, 1997 up to Oct 10, 2001.

Now, from May 11, 1997 - May 10, 1998 = 1 odd day

May 11, 1998 - May 10, 1999 = 1 odd day

May 11, 1999 - May 10, 2000 = 2 odd days (2000 was leap year)

May 11, 2000 - May 10, 2001 = 1 odd day

Thus, the total number of odd days up to May 10, 2001 = 5.

The remaining 21 days of May will give 0 odd days. In June, we have 2 odd days; in July, 3 odd days; in August, 3 odd days; in September,2 odd days and up to 10th October, we have 3 odd days.

Hence, total number of odd days = 18 i.e. 4 odd days.

Since, May 10, 1997 was a Monday, and then 4 days after Monday would be Friday. So, Oct 10, 2001 was Friday.

Question: 44

**If April 11, 1911 was a Tuesday, what was the day on September 17, 1915?**

A. Friday

B. Thursday

C. Sunday

D. Tuesday

**Ans:A**

**Sol :**

Firstly in terms of years, the year 1911 to 1912 would give us 2 odd days and 1913, 1914, 1915 would give 1, 1 and 1 odd day respectively.

Now shift the focus on months. If you move one month ahead i.e. from 11th April to 11th May, the month ending in between is April, which gives you 2 days. Now after that the month of May, June, July, and August gives you 3, 2, 3, and 3 odd days respectively.

With this you reach on 11th September 1915. After this, there are 6 more September days (from 11th to 17th September).

The total number of odd days is 2 + 1 + 1 + 1 + 2 + 3 + 2 + 3 + 3 + 6 = 24.

Subtracting 21 (3 full weeks) from this the odd number of days left is 3.

Adding three days to the day given i.e. Tuesday, the answer becomes Friday.

Question: 45

**Tuesday fell on which of the following dates of April, 2002?**

A. 3rd, 10th, 17th, 24th

B. 1st, 8th, 15th, 22nd, 29th

C. 4th, 11th, 18th, 25th

D. 2nd, 9th, 16th, 23rd, 30th

**Ans:D**

**Sol :**

We have to find the day on 1st April, 2002.

1st April, 2002 = (2000 years + time period from 1.1.2002 to 1.4.2002)

1600 years » 0 odd days

400 years » 0 odd days

Jan. Feb. March April

(31 + 28 + 31 + 1) = 91 days ≡ 0 odd days.

Total number of odd days = (0 + 0 + 0) = 0

On April 1, 2002 it was Monday.

So in April 2002, Tuesday falls on 2nd, 9th, 16th and 23rd & 30th.

Question: 46

**If it was Thursday on Aug 15, 2012, then what was the day on June 11, 2013?**

A. Wednesday

B. Monday

C. Saturday

D. Tuesday

**Ans:A**

**Sol :**

First, we count the number of odd days for the left over days in the given period.

Here, given period is from 15.8.2012 to 11.6.2013

Aug Sept Oct Nov Dec Jan Feb Mar Apr May Jun

16 30 31 30 31 31 28 31 30 31 11(left days)

Therefore, 2 + 2 + 3 + 2 + 3 + 3 + 0 + 3 + 2 + 3 + 4 (odd days) = 6 odd days

So, the given day Thursday + 6 = Wednesday.

Question: 47

**Pinky was born on 29th, Feb 2016 which happened to be a Monday. If she lives to be till 2099, how many birthdays would she celebrate on a Monday?**

A. 1

B. 2

C. 3

D. 5

**Ans: B**

**Sol :**

29th Feb, 2016 = Monday => 28th Feb, 2012 = Sunday

28th Feb, 2017 = Tuesday (because 2016 is a leap year, there will be 2 odd days)

Therefore» Feb 28th 2018 (Wednesday), Feb 28th 2019 (Thursday), Feb 28th 2020 (Friday), Feb

29th 2020 (Saturday)

Or, Feb 29th to Feb 29th after 4 years, we have 5 odd days.

So, every subsequent birthday, would come after 5 odd days.

2020 birthday – 5 odd days

2024 birthday – 10 odd days = 3 odd days

2028 birthday – 8 odd days = 1 odd day

2032 birthday – 6 odd days

2036 birthday – 11 odd days = 4 odd days

2040 birthday – 9 odd days = 2 odd days

2044 birthday – 7 odd days = 0 odd days. So, after 28 years, his birthday would fall on Monday.

The next birthday on Monday would be in year 2072 (further 28 years later), the one after that would be in year 2100. But we are told that she lives upto year 2099.

So, there are 2 occurrences of his birthday falling on Monday – 2044 & 2072.

Question: 48

**What was the day of the week on 16th June, 1999?**

A. Saturday

B. Monday

C. Wednesday

D. Thursday

**Ans:C**

**Sol :**

June, 1999 = (1998 years + time period from 1.1.1999 to 16.6.1998)

1600 years » 0 odd days

300 years » 1 odd days

98 years has 74 ordinary years + 24 leap years.

Number of odd days in 98 years (24 × 2 + 74) = 122 days = 3 odd days.

Jan. Feb. March. April. May. June.

(31 + 28 + 31 + 30 + 31 + 16) = 167 days

167 days = 23 weeks & 6 days = 6 odd days.

Total number of odd days = (0 + 1 + 3 + 6) = 3

So, the given day is Wednesday.