

Calendar - Solved Examples

Q 1 – Find the day of the week on 27th dec 1985.

A - Friday

B - Sunday

C - Monday

D - Thursday

Answer - A

Explanation

27th dec 1985 has 1984 years, 11 months and 27 days. Now 1600 years have no odd days at all. One odd day is present in 300 years. 84 years have twenty one leap years and 63 ordinary years so the number of days can be calculated as follows –

$(21 \times 366 + 63 \times 365)$ days

$= (7686 + 22995)$ days

$= 30681$ days $= 30681/7 = 4383$ weeks. It means 84 years contain no odd days.

11 months and 27 days $= 361$ days $= 51$ weeks $+ 4$ odd days. On calculation $4 + 1 = 5$. 5 odd days means that day is Friday. Hence option A is correct.

Q 2 – Find the day of the week on 11th April 1980.

A - Friday

B - Sunday

C - Monday

D - Tuesday

Answer - A

Explanation

11th April 1980 has 1979 years, 3 months and 11 days. Now 1600 years have no odd days and 300 years have one odd day. 79 years contain 19 leap years and 60 ordinary years. The number of days of 79 years can be calculated as follows –

$(19 \times 366 + 60 \times 365)$ days

$= 28854$ days $= 28854/7 = 4122$ weeks. It means 79 years contain no odd days.

3 months and 11 days $= 102$ days $= 14$ weeks $+ 4$ days $= 4$ odd days. $4 + 1 = 5$. 5 odd days means that day is Friday. Hence option A is correct.

Q 3 – Find the day of the week on 12th March 1950.

A - Friday

B - Sunday

C - Monday

D - Thursday

Answer - B

Explanation

12th March 1950 has 1949 years, 2 months and 12 days. Now 1600 years have no odd days. 300 years have 1 odd day. 49 years contain 12 leap years and 37 ordinary years So number of days in 37 years can be calculated as follows:

$(12 \times 366 + 37 \times 365)$ days

= 17897 days = $17897/7 = 2556$ weeks and 5 odd days. It means 49 years contain 5 odd days.

2 months and 12 days = 71 days = 10 weeks + 1 odd day which means $1 + 5 + 1 = 7$. 7 odd days means that day is Sunday. Hence option B is correct.

Q 4 – Today is Wednesday, what will be the day after 91 days?

A - Monday

B - Tuesday

C - Sunday

D - Wednesday

Answer - D

Explanation

Every day of the week is repeated after 7 days. Hence, it will be Wednesday after 91 days because $13 \times 7 = 91$.

Q 5 – Today is Friday, what will be the day after 59 days?

A - Monday

B - Tuesday

C - Sunday

D - Wednesday

Answer - A

Explanation

Every day of the week is repeated after 7 days. Hence, it will be Friday after 56 days because $8 \times 7 = 56$. After this, 3 more days are left which means it is Monday.

Q 6 – Today is Monday, what will be the day after 32 days?

A - Monday

B - Tuesday

C - Sunday

D - Friday

Answer - D

Explanation

Every day of the week is repeated after 7 days. Hence, it will be Monday after 28 days because $4 \times 7 = 28$. After this, 4 more days are left which means it is Friday, hence option D is correct.

Q 7 – Today is Ram’s birthday which falls on Wednesday, Gopal’s birthday falls after 50 days after Ram’s birthday. On which day Gopal’s birthday falls?

A - Monday

B - Thursday

C - Sunday

D - Wednesday

Answer - B

Explanation

Every day of the week is repeated after 7 days. Hence, it will be Wednesday after 49 days. Because $7 \times 7 = 49$. After this one more day means Thursday. So Gopal’s birthday falls on Thursday.

Q 8 – Today is physics exam which falls on Sunday, the next physics exam will take place after a fortnight. On which day the next physics exam will take place?

A - Monday

B - Tuesday

C - Sunday

D - Wednesday

Answer - A

Explanation

As we know that every day of the week is repeated after 7 days. Hence, it will be Sunday after 14 days because $2 \times 7 = 14$. After this one more day is left and that will be Monday.

Q 9 – Today is Saturday, what will be the day after 86 days?

A - Monday

B - Tuesday

C - Sunday

D - Wednesday

Answer - A

Explanation

Every day of the week is repeated after 7 days. Hence, it will be Saturday after 84 days because $12 \times 7 = 84$. After this two more days are remaining which means on 86th day, the day will be Monday.

Q 10 – Today is zoology practical which falls on Thursday, the next zoology lab will take place after a fortnight. On which day the next zoology lab will take place?

A - Monday

B - Friday

C - Sunday

D - Wednesday

Answer - B

Explanation

Every day of the week is repeated after 7 days. Hence, it will be Thursday after 14 days because $2 \times 7 = 14$. After this, one more day means the lab will take place on Friday.