

1. Write the correct answer in your answer script: $1 \times 8 = 8$

a. What is calendar?

Ans: Calendar: A chart or series of pages showing the days, weeks, and months of a particular year, or giving particular seasonal information.

b. How many seconds are there in half an hour?

Ans: 180 seconds.

Half an hour = 30 minutes

= (30×60) seconds [\because 1 minutes = 60 seconds]

= 1800 seconds

c. How many days in the month of Ashwin?

Ans: 30 days.

d. Your school breaks at 3 in the afternoon. At what time in international system does your school break?

Ans: 15:00.

e. Was 2012 a leap year?

Ans: 2012 was a leap year.

f. Which century is from 1901 to 2000?

Ans: 20th century.

g. A bus starts for Kolkata at 20:40 in international system. At what time of night did the bus start?

Ans: 8:40 p.m.

h. What is the period of 12 consecutive years called?

Ans: Era.

2. Kamal spent February 2012 in Dhaka.

a. How many hours did he spend in Dhaka? **2**

b. How many seconds did he spend in Dhaka? **2**

Solution:

a)

$$\begin{array}{r} 503 \\ 4 \overline{) 2012} \\ \underline{20} \\ 12 \\ \underline{12} \\ 0 \end{array}$$

Since there is no remainder, so 2012 is a leap year.

So February has 29 days.

Now,

29 days

= (29×24) hours [\because 1 day = 24 hours]

= 696 hours

\therefore Kamal spent 696 hours in Dhaka.

Ans: 696 hours.

b) From 'a' we get,

29 days = 696 hours

= (696×60) minutes [\because 1 hour = 60 minutes]

= 41760 minutes

$$= (41760 \times 60) \text{ seconds } [\because 1 \text{ minutes} = 60 \text{ seconds}]$$

$$= 2505600 \text{ seconds}$$

\therefore Kamal spent 2505600 seconds in Dhaka.

Ans: 2505600 seconds.

3. Salma goes to bed at 10:30 p.m. and gets up at 6 a.m. in the morning.

a. Express the time when Salma goes to bed in 24 hour clock. **2**

b. How long does she sleep? **2**

Solution:

a) Salma goes to bed at 10:30 p.m.

In 24 hour clock she goes to bed at = 12:00 + 10:30 = 22:30

Ans: 22:30.

b)

-1 hour	Hour	Minute	+60 min
	12	00	
	-	10	
	1	30	

60
-30
30

Now,

Hour	Minute
6	00
+	1
7	30

\therefore Salma sleep for 7 hours 30 minutes.

Ans: 7 hours 30 minutes.

4. Rakib was born on 25th February, 2010. His cousin Tanha was born after 7 days.

a. How many hours are there in February 2010? **2**

b. Write the birth date of Tanha. **2**

Solution:

a)

$$\begin{array}{r} 502 \\ 4 \overline{) 2010} \\ \underline{20} \\ 10 \\ \underline{8} \\ 2 \end{array}$$

Since there is a remainder, which is 2. So 2010 is not a leap year.
So February, 2010 has 28 days.

Now,

28 days

= (28×24) hours [\because 1 day = 24 hours]

= 672 hours

Ans: 672 hours.

b) From 'a' we get, February, 2010 has 28 days.

\therefore Remaining day of February = $28 - 25 = 3$ days

February will end 3 days after Rakib's birthday, and then March will start.

\therefore Tanha's birthday will be = $7 - 3 = 4$ March, 2010.

Ans: 4 March, 2010.