

JavaScript Date & Time — One-Page Exam Cheat Sheet

1) Creating Dates

```
new Date()           // current date & time (object)
Date()              // current date & time (string)
new Date(y, m, d, h, min) // specific date
```

Month Index (VERY IMPORTANT)

Number	Month
0	January
1	February
11	December

2) Getting Parts of Date

```
d.getFullYear() // 4-digit year
d.getMonth()    // 0-11
d.getDate()     // 1-31 (day of month)
d.getDay()      // 0-6 (Sun-Sat)
d.getHours()    // 0-23
d.getMinutes()  // 0-59
d.getSeconds() // 0-59
```

3) Setting Parts of Date

```
d.setFullYear(2030)
d.setMonth(0)    // January
d.setDate(15)
d.setHours(12)
```

4) Date Overflow (EXAM FAVORITE)

Invalid dates are **auto-corrected** by JavaScript.

```
new Date(2024, 1, 30) // Feb 30, 2024 → auto-corrects
```

- Feb 2024 has **29 days** (leap year) - Extra day overflows into **March**

```
d.getDate() // 2
```

More examples:

```
new Date(2024, 0, 32).getDate(); // 1 (Feb 1)  
new Date(2024, 3, 31).getDate(); // 1 (May 1)
```

5) GMT, UTC & Time Zone

- **GMT** = Greenwich Mean Time
- **UTC** = Coordinated Universal Time (modern, precise)
- **Time zone** = local offset from GMT/UTC

```
new Date().toString(); // local time + GMT offset  
new Date().toUTCString(); // UTC time
```

Example: - IST = **GMT + 5:30**

6) typeof with Date

```
typeof new Date(); // "object"
```

7) Common Exam Traps

```
console.log(Date()); // string (not object)  
console.log(typeof d); // object
```

```
console.log(d.getMonth());      // 0-11  
console.log(d.getDay());       // 0-6 (Sunday = 0)
```

8) Quick Memory Rules

- Month starts at **0**
- Day starts at **Sunday = 0**
- Invalid date → **auto-correct**
- **Date()** → string
- **new Date()** → object

✓ Use this page for last-minute revision before exams