AURORA HIGHER EDUCATION AND RESEARCH ACADEMY

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Uppal, Hyderabad, Telangana | Bhongir, Yadadri, Telangana

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|-----------------------------|-----------------------------------------------------|----------------------------------------------------------|
| Student Registration Number | 232P4R1014 | Class & Section: MCA-A |
| Study Level: UG/PG | PG | Year & Term: 2 ND YEAR & 3r ^d TERM |
| Subject Name | BACKEND WEB DEVELOPMENT WITH NODE JS AND EXPRESS JS | |

| Name of the Assessment | Free Writing - 2 |
|------------------------|------------------|
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Free Writing – 2

Understanding NodeJS:

Node.js is a JavaScript runtime that lets us run JavaScript outside the browser. It's great for building fast, scalable server-side applications because of its non-blocking, event-driven nature.

Understanding Node.js Performance

Node.js is known for its high performance. It handles multiple requests at once using a single thread, which makes it fast. It uses the V8 engine and asynchronous events to improve speed.

Data Intensive Applications

Node.js is ideal for data-intensive applications because it can handle a lot of data and large-scale applications efficiently. It works well with real-time data like chat apps, streaming, and online gaming.

Reading and Writing Files Synchronously and Asynchronously

Node.js allows reading and writing files in two ways:

- **Synchronous**: The program waits until the file operation finishes.
- **Asynchronous**: The program continues without waiting for the operation to complete, making it faster for large tasks.