**• Explain the need and benefits of React Router**

**Ans.** React Router allows us to navigate through different components without refreshing the entire page. It maps the URLs to components to mimic traditional multi-page behavior, maintaining a consistent browser history and backward/forward navigation.

**Benefits:**

* Declarative routing using <Router> and <Link>
* Seamless navigation in Single Page Applications (SPAs)
* Supports nested routes, route protection, and lazy loading
* Clean and readable URLs
* Easy to manage large-scale app routing logic

**• Identify the Components in React Router**

**Ans.** i) <BrowserRouter>

ii) <Routes>

iii) <Route>

iv) <Link>

v) <NavLink>

vi) <useParams>

vii) <useNavigate>

**• List the types of Router Components**

**Ans.** a) BrowserRouter

b) HashRouter

c) MemoryRouter

d) StaticRouter

e) NativeRouter

**• Parameter passing via URL**

**Ans.** Step1—Define a Route with a parameter



Step2—Navigate to that Route



Step3—Access Parameter in Component

