***Governor Sindh***

*I.T Initiative for Artificial Intelligence,Web 3.0 & Metaverse.*

**Batch: 1**

Tuesday 2 to 5

Here are multiple-choice questions (MCQs) about ***TypeScript***

1. What is TypeScript?

a) A superset of JavaScript  
b) A framework for building web applications  
c) A programming language based on C#  
d) A database management system

1. Which of the following statements is true about TypeScript?

a) It runs on the client-side only  
b) It is interpreted at runtime  
c) It supports static typing  
d) It is primarily used for server-side scripting

1. TypeScript is developed and maintained by:

a) Facebook  
b) Google  
c) Microsoft  
d) Mozilla

1. What is the file extension for TypeScript files?

a) .js  
b) .ts  
c) .html  
d) .css

1. Which of the following is NOT a feature of TypeScript?

a) Static typing  
b) Optional static typing  
c) Dynamic typing  
d) Interfaces

1. TypeScript code is compiled into:

a) Machine code  
b) Assembly code  
c) JavaScript  
d) TypeScript bytecode

1. Which tool is commonly used to transpile TypeScript code to JavaScript?

a) Babel  
b) Webpack  
c) TypeScript Compiler (tsc)  
d) Node.js

1. What is the purpose of using TypeScript over JavaScript?

a) To make code execution faster  
b) To enforce static typing and catch errors at compile-time  
c) To enable access to browser-specific APIs  
d) To reduce the need for testing

1. Which of the following is an advantage of using TypeScript?

a) It requires fewer resources to run  
b) It offers better performance than JavaScript  
c) It provides better tooling and code maintenance support  
d) It has broader browser compatibility

1. TypeScript supports which paradigm(s) of programming?

a) Object-oriented  
b) Functional  
c) Both Object-oriented and Functional  
d) None of the above

Top of Form

Bottom of Form

**Node.js:**

1. What is Node.js?

a) A web browser  
b) A server-side runtime environment   
c) A front-end JavaScript framework  
d) A database management system

1. Which of the following is NOT a feature of Node.js?

a) Non-blocking I/O operations  
b) Single-threaded event loop  
c) Synchronous execution model  
d) Asynchronous programming

1. Node.js uses which JavaScript engine for executing code?

a) V8   
b) SpiderMonkey  
c) Chakra  
d) Rhino

1. Which of the following modules is commonly used for creating web servers in Node.js?

a) http   
b) fs  
c) path  
d) os

1. Which package manager is commonly used with Node.js for installing third-party modules?

a) npm   
b) pip  
c) yarn  
d) composer

1. Node.js is primarily written in which programming language?

a) Python  
b) C++   
c) Java  
d) JavaScript

1. Which of the following is NOT a built-in module in Node.js?

a) fs  
b) http  
c) express   
d) os

1. What does REPL stand for in Node.js?

a) Read Execute Print Loop   
b) Runtime Environment Programming Language  
c) Real-time Execution Programming Logic  
d) Relational Express Print Loop

1. Which of the following is NOT a common use case for Node.js?

a) Building web servers  
b) Building desktop applications  
c) Building real-time applications   
d) Building command-line tools

1. Node.js was initially released in which year?

a) 2005  
b) 2010  
c) 2009   
d) 2015

**Visual Studio Code (VSC):**

1. What is Visual Studio Code (VSC)?

a) An integrated development environment (IDE)   
b) A programming language  
c) A version control system  
d) A web browser

1. Which company develops Visual Studio Code?

a) Google  
b) Facebook  
c) Microsoft   
d) Apple

1. Visual Studio Code supports which of the following programming languages?

a) JavaScript  
b) Python  
c) TypeScript  
d) All of the above

1. Which of the following is NOT a feature of Visual Studio Code?

a) IntelliSense  
b) Integrated terminal  
c) Version control system  
d) Debugging support

1. Visual Studio Code is built using which web technologies?

a) Angular  
b) React  
c) Electron   
d) Vue.js

1. Which of the following is NOT a supported operating system for Visual Studio Code?

a) Windows  
b) macOS  
c) Linux  
d) Android

1. Which file type is commonly associated with Visual Studio Code settings?

a) .json   
b) .css  
c) .js  
d) .html

1. What does the term "VSCodium" refer to?

a) A paid version of Visual Studio Code  
b) An open-source version of Visual Studio Code   
c) A plugin for Visual Studio Code  
d) A cloud-based version of Visual Studio Code

1. Visual Studio Code provides built-in support for which version control system?

a) Git   
b) Subversion  
c) Mercurial  
d) Perforce

1. Which of the following is a popular extension for Visual Studio Code used for code formatting?

a) ESLint  
b) Prettier   
c) TypeScript  
d) React Developer Tools