Sure, here are the multiple-choice questions (MCQs) with answers and options:

Q1) Tell me the output.

```plaintext
let myData: any;
console.log(typeof myData);
```

Options:

- A) any
- B) undefined
- C) never
- D) unknown

Answer: A) any

Q2) Tell me the output.

```plaintext
let myData: string = "Muhammad Fasih";
myData = 20;
console.log(myData);
```

Options:

- A) Muhammad Fasih
- B) Runtime Error
- C) Type Error
- D) undefined

Answer: B) Runtime Error

Q3) Mention the output.

```plaintext
const myData;
console.log(myData);
```

Options:

- A) Syntax Error
- B) Reference Error
- C) Type Error
- D) undefined

Answer: A) Syntax Error

Q4) Tell me the output.

```plaintext
let a: number = 5;
let b: number = 2;
const c: number = --a + b++ * a++;
console.log(a + b + c);
```

Options:

- A) 32
- B) 20
- C) 23
- D) 18

Answer: C) 23

Q5) Tell me the output.

```plaintext
const myNum: number = 10;
console.log(++myNum);
```

Options:

- A) 10
- B) 11
- C) 9
- D) Error

Answer: B) 11

Q6) Tell me the output.

```plaintext
const data1: number = 11;
const data2: boolean = data1 % 3 === 2;
const data3: boolean = data1 > 11 || data2;
console.log(data3);
```

Options:

- A) true
- B) false
- C) Syntax Error

- D) undefined

Answer: A) true

Q7) Tell me the output.

```plaintext
const myName: string = "Muhammad Fasih";
if (myName.length === 13) {
   console.log("Hello");
} else {
   console.log("World");
}
```

Options:

- A) Hello
- B) Muhammad Fasih
- C) World
- D) 13

Answer: C) World

Q8) Tell me the output.

```plaintext
const myAge: number = 20;
if (myAge > 18) {
   const message: string = "You can drive a car";
} else {
```

```
    const message: string = "You cannot drive a car";
}
console.log(message);
```

Options:

- A) You can drive a car
- B) undefined
- C) You cannot drive a car
- D) Error

Answer: B) undefined

Q9) Tell me the output.

```plaintext
const message: string = 0 ? "Hello" : "World";
const name: string = "" ? "Fasih" : "Salman";
console.log(name, message);
```

Options:

- A) Hello Fasih
- B) Salman Hello
- C) Salman World
- D) Fasih Hello

Answer: C) Salman World

Q10) Mention the output.

```plaintext
let a: number = 5;
const b: number = 6;
const c: number = !(a > b || b > a) ? a * b : a++ + b;
console.log(a + b + c);
```

Options:

- A) 41
- B) 40
- C) 23
- D) 22

Answer: D) 22

Q11) Tell me the output.

```plaintext
const directions: number = 3;
switch (directions) {
   case 1: console.log("Up");
   case 2: console.log("Down");
   case 3: console.log("Left");
   case 4: console.log("Right"); break;
   default: console.log("Select num between 2-4");
}
```

Options:

- A) Down
- B) Left, Right

- C) Up, Down, Left, Right
- D) Down, Left

Answer: B) Left, Right

Q12) Mention the output.

```plaintext
if (!(10 > 10 && 5 < 2) && (6 > 3 || 8 < 4)) {
   console.log("Hello");
} else {
   console.log("World");
}
```

Options:
- A) World
- B) Hello
- C) Both Hello and World
- D) No output

Answer: B) Hello

Q13) Tell me the output.

```plaintext
const a: number = 5;
const b: string = "10";
console.log(a + b + a);
```

Options:

- A) 5105
- B) 20
- C) 10510
- D) Error

Answer: A) 5105

Q14) Tell me the output.

```plaintext
const myName: string = "muhammad fasih";
myName.slice(0).toUpperCase();
console.log(myName);
```

Options:

- A) MUHAMMAD FASIH
- B) Muhammad Fasih
- C) muhammad fasih
- D) Cannot use slice method on strings

Answer: C) muhammad fasih

Q15) Tell me the output.

```plaintext
var a: number = 10
var a: number = 12
console.log(a);
```

```

Options:

- A) 10
- B) 12
- C) undefined
- D) Error

Answer: B) 12

**Q16) Mention the output.**

```plaintext
var myName: string = "Muhammad Fasih";
const myAge: number = 20;
if (myAge > 20) {
   console.log(myName.toUpperCase());
} else {
   console.log(myName.toLowerCase());
}
```

Options:

- A) MUHAMMAD FASIH
- B) muhammad fasih
- C) Muhammad Fasih
- D) Cannot find variable myName (Error)

Answer: C) Muhammad Fasih

Q17) Mention the output.
```

```plaintext
let myColor: "Blue" | "Green" | "Red";
myColor = "blue";
console.log(myColor);
```

Options:

- A) Runtime Error
- B) Type Error
- C) Green
- D) Blue

Answer: D) Blue

Q18) Mention the output.

```plaintext
let myData;
myData = "Hello World";
myData = 10;
myData = false;
console.log(myData);
```

Options:

- A) Hello World
- B) 10
- C) false
- D) Error

Answer: C) false

Q19) Tell me the output.

```plaintext
let myMessage: string = "";
if (myMessage) {
  myMessage += "Hello";
} else {
  myMessage += "World";
}
const abc: boolean = myMessage.includes("e");
myMessage = ""
console.log(abc || !myMessage);
```

Options:

- A) false
- B) true
- C) Hello
- D) World

Answer: B) true

Q20) Mention the output.

```plaintext
let myMessage: string = "" ? "hello" : "world";
const letter: string = myMessage.charAt(1).toUpperCase();
console.log(letter);
```

```

Options:

- A) H
- B) E
- C) W
- D) O

Answer: B) E

**Q21) Tell me the output.**

```plaintext
const myName: string = "Muhammad Fasih".charAt(4).toUpperCase();
console.log(myName);
```

Options:

- A) M
- B) cannot reassign const variable (Error)
- C) MuhaMmad Fasih
- D) MUHAMMAD FASIH

Answer: A) M

Q22) Mention the output.

```plaintext
const myMessage: string = "Hello World";
const num: number = 8;
console.log(myMessage.length + num)
```
```

```

Options:

- A) 19
- B) 18
- C) 20
- D) 17

Answer: B) 18

**Q23) Mention the result**

```plaintext
let myData: number | boolean = false;
myData = "10";
console.log(myData);
```

Options:

- A) false
- B) Type Error
- C) undefined
- D) Runtime Error

Answer: A) false

Q24) What will be the output?

```plaintext
let myName: string = "Muhammad Fasih";
myName = "Salman Shahid";
```
```

console.log("myName");

```

Options:

- A) Salman Shahid

- B) Muhammad Fasih

- C) myName

- D) undefined

Answer: C) myName

**Q25) Mention the output.**

```plaintext
console.log(myMessage);

const myMessage: string = "Hello World";
```

Options:

- A) Hello World

- B) undefined

- C) Reference Error

- D) Type Error

Answer: C) Reference Error

These questions cover various aspects of TypeScript

syntax, type checking, scope, and logical operations. If you have any more questions or need further clarification, feel free to ask!
```

Topics:
Reference Error
Type Error
Syntax Error
Variables
Data types
Let, Const and Var
If else statement
Ternary operator
Switch case statement
Union types
Post increment
Pre increment
Logical operator
Arithmetic operators
Arithmetic assignment operators
Slice method
CharAt method
LowerCase and upperCase