

## Section-4

### Boolean and Conditional Logic

Q1) Write data type names ?

|         |       |
|---------|-------|
| 4       | int   |
| 5.676   | float |
| True    | bool  |
| "hello" | str   |

Q2) Write Output of the following programs ?

```
str_one = "hello"
str_two = "world"
message = str_one + " " + str_two
a) print(message)
```

**Output: hello world**

```
message = "welcome!"
first_character = message[0]
b) print(message[-1])
```

**Output: !**

```
message = "welcome!"
first_character = message[0]
c) print(first_character)
```

**Output: w**

```
message = "welcome!"
d) print(message[10])
```

**Output: Error Index out of range**

Q3) Output of following program ?

```
text = input("Type text here: ")
print(text)
```

**Output:** what ever is typed by the use on shell

Q4) **input function** return value type ?

- a) int
- b) str **(Correct Answer)**
- c) bool
- d) float

Q5) what is the data type of **num** variable ?

```
num = int(input("type any number"))
```

A5) int

Q6) IDE stands for ?

A6) Integrated Development environment

Q7) Write all comparison operators ? ( name and symbols)

A7) Look in slides

Q8) How to do equality in python ?

A8) ==

Q9) Indexing in programming starts at which number ?

A9) 0

Q10) Output of following program ?

```
a = True
b = False
if a and b:
    print("all Good")
else:
    print("a and b are not equal")
```

**Output:** a and b are not equal