

1. In python, which is the correct operator for power(x^y)?

- a) X^y
- b) $X**y$
- c) $X^{^y}$
- d) None of the mentioned

2. Which one of the following have the highest precedence in a python expression?

- a) Exponential
- b) Addition
- c) Multiplication
- d) Parentheses

3. What is the result of the expression shown below if $x=56.236$?
`print("%.2f"%x)`

- a) 56.00
- b) 56.24
- c) 56.23
- d) 0056.236

4. What is the output of the code snippet shown below?

```
A = [[1,2,3],[4,5,6],[7,8,9]]  
A[1]
```

- a) [1, 2, 3]
- b) [1]
- c) [4, 5, 6]
- d) [4]

5. What is the output of the following?

```
i = 1  
while True:  
    if i%7 == 0:  
        break  
    print(i)  
    i += 1
```

- a) 1 2 3 4 5 6
- b) 1 2 3 4 5 6 7
- c) error
- d) none of the above

6. Suppose list1 is [2, 33, 222, 14, 25]. What is list1[:-1] ?

- a) [2, 33, 222, 14].
- b) Error
- c) 25
- d) [25, 14, 222, 33, 2].

7. What is the output of the code shown below?

```
def f(x):  
    return bool(x%2)  
print(f(20), f(21))
```

- a) False True
- b) False False
- c) True True
- d) True False

8. 3 coins are tossed simultaneously where the probability of getting head for each coin is 0.8. Find the probability of getting 2 heads and 1 tail.

- a) 0.128
- b) 0.384
- c) 0.512
- d) none of the above

9. Find the expected value of the following discrete distribution.

```
Y      = [0,   1,   2,   3,   5 ]  
P(Y) = [0.4, 0.15, 0.1, 0.15, 0.2]
```

- a) 1.8
- b) 2.0
- c) 2.5
- d) none of the above