

Mid-Term Examination, Even Semester 2019-20

B.Tech. (All Branch), 1st Year, 2nd Semester

Subject Code: Python Programming (BCSG0001) Solution

Time: 2 Hours

Maximum Marks: 30

Section- A

Note: Attempt All Three Questions..

3 x 2 = 06 Marks

1. A). id() : accepts a single parameter and is used to return the identity of an object. this identity has to be unique and constant for this object during the lifetime

B). str(): The str() function is used to convert the specified value into a string. Any object. Default is utf-8

C). ord(): function returns the number representing the unicode code of a specified character

D). chr() method returns a character whose unicode point is num, an integer

Example:

```
A = 100
```

```
print(id(A)) #output: integer number
```

```
print(str(A)) # output: '100'
```

```
print(ord('A')) # output: 65
```

```
print(chr(A)) # output: 'd'
```

2. last <class 'str'>

3. define is, is not, in and not in. examples must.

```
A = 1
```

```
B = 1.0
```

```
print(A is B) # False
```

```
print(A is not B) # True
```

```
print(A not in [1, 2, 3, 5]) # False
```

```
print(A in [1, 2, 3, 5]) # True
```

Section- B

Note: Attempt All Three Questions.

3 x 3 =09 Marks

1. ans: define any three list methods count() index() copy() suitable examples necessary
out: ['water', 'objects'] <class 'list'>
2. Ans: Definition of tuple with example of creation and initialization
Program:
T1 = eval(input())
T2 = eval(input())
T = tuple([I for I in T1 if I in T2])
print(T)
3. Explanation of any five methods count(), index(), find(), rfind(), rindex() with suitable examples.
print('all characters are same' if len(set(input()))==1 else None)

Section – C

Note: Attempt Any Three Questions.

3 x 5 = 15 Marks

1. Any four difference between list and tuple. Explanation with example required.
L1 = eval(input())
L2 = eval(input())
L = [(L1[i], L2[i]) for i in range(len(L1) if len(L1)<len(L2) else len(L2))]

```
print(L)
```

2. Any two string format .format() and f.'format {st}'. explanation with example necessary.

```
st = input()
vw = dig = cs = ws = 0
for i in st:
    if i in ['a', 'e', 'i', 'o', 'u']:
        vw += 1
    elif i.isdigit():
        dig += 1
    elif i in [' ', '\n', '\t', '\r']:
        ws += 1
    elif i.isalpha():
        cs += 1
print(vw, dig, ws, cs)
```

3. Clearly explanation of if-else and for loop and while loop. Examples is mandatory
Break: The break statement, breaks out of the innermost enclosing for or while loop. break just stop the iteration within the loop

Continue: The continue statement, continues with the next iteration of the loop.

Examples mandatory

Ans: 10

4. Explanation any four rules of identifier. Examples is mandatory.
Any four difference between immutable and mutable objects with examples.
int, float, complex, string, tuple, bool.

Ans : None