UNIVERSITY COLLEGE OF ENGINEERING - BIT CAMPUS TRICHY

DEPARTMENT OF CSE/IT,

Subject: GE8151-PSPP Date – 05-12-2018

Year/Section : I yr – I(Mech) Sem – I Time: 3.00 Hour Max: 100 Marks

Part-A

1. Define algorithm and pseudo code?

**Pseudocode** is an informal high-level description of the operating principle of a computer program or other**algorithm**. It uses the structural conventions of a normal programming language, but is intended for human reading rather than machine reading.

1. Explain input and output statements on python?

Input Output in Python

**Input** using the **input**( ) function. A function is defined as a block of organized, reusable code used to perform a single, related action. **Python** has many built-in functions; you can also create your own. **Python** has an **input** function which lets you ask a user for some text **input**.

1. What is the comment statement in python?

**Comments** in **Python** start with the hash character, # , and extend to the end of the physical line. A **comment** may appear at the start of a line or following whitespace or code, but not within a string literal. A hash character within a string literal is just a hash character.

1. What are the various parameter passing techniques?

**In the call-by-value technique**, the actual parameters in the method call are copied to the dummy parameters in the method definition. So, whatever changes are performed on the dummy parameters, they are not reflected on the actual parameters as the changes you make are done to the copies and to the originals.

**In the call-by-reference technique**, reference (address) of the actual parameters are passed to the dummy parameters in the method definition. So, whatever changes are performed on the dummy parameters, they are reflected on the actual parameters too as both references point to same memory locations containing the original values.

1. Define dictionary and tuples.

It is best to think of a **dictionary** as an unordered **set** of key: value pairs, with the requirement that the keys are unique (within one **dictionary**) and must be of an immutable types, such as a Python string, a number, or a **tuple**.

1. Define file and list the file opening models.

A **file format** is a standard way that information is encoded for storage in a computer **file**. It specifies how bits are used to encode information in a digital storage medium. **File formats** may be either proprietary or free and may be either unpublished or **open**.

1. Define pickling.

**Pickling** is the process of preserving or extending the lifespan of food by either anaerobic fermentation in brine or immersion in vinegar. The resulting food is called a **pickle**, or, to prevent ambiguity, prefaced with **pickled**. The **pickling** procedure will typically affect the food's texture and flavor.

**Part-B**

1. what are the types of operators supported by

python language? List the operators and explain them.

**Types of operators**

* Assignment **Operator**.
* Mathematical **Operators**.
* Relational **Operators**.
* Logical **Operators**.
* Bitwise **Operators**.
* Shift **Operators**.
* Unary **Operators**.
* Ternary **Operator**.
* Explain python modules in detail. Explain some of the build-in modulus available in python.

1. what is a fruitful function? What are the parameters used in the fruitful functions.

**fruitful function** A **function** that yields a return value.

**Parameters of fruitful function:**

## Return values

## Program development

## Composition

## Boolean functions

## The function types

.10. Explain the data type dictionary with example?

Accessing Dictionary Elements

1. **Accessing Data Items with Keys**
2. **Using Methods to Access Elements**

Modifying Dictionaries

1. **Adding and Changing Dictionary Elements**
2. **Deleting Dictionary Elements**

11. Explain with examples modules and packages.

* [Python Modules: Overview](https://realpython.com/python-modules-packages/#python-modules-overview)
* [The Module Search Path](https://realpython.com/python-modules-packages/#the-module-search-path)
* [The import Statement](https://realpython.com/python-modules-packages/#the-import-statement)
  + [import <module\_name>](https://realpython.com/python-modules-packages/#import-ltmodule_namegt)
  + [from <module\_name> import <name(s)>](https://realpython.com/python-modules-packages/#from-ltmodule_namegt-import-ltnamesgt)
  + [from <module\_name> import <name> as <alt\_name>](https://realpython.com/python-modules-packages/#from-ltmodule_namegt-import-ltnamegt-as-ltalt_namegt)
  + [import <module\_name> as <alt\_name>](https://realpython.com/python-modules-packages/#import-ltmodule_namegt-as-ltalt_namegt)
* [The dir() Function](https://realpython.com/python-modules-packages/#the-dir-function)
* [Executing a Module as a Script](https://realpython.com/python-modules-packages/#executing-a-module-as-a-script)
* [Reloading a Module](https://realpython.com/python-modules-packages/#reloading-a-module)
* [Python Packages](https://realpython.com/python-modules-packages/#python-packages)
* [Package Initialization](https://realpython.com/python-modules-packages/#package-initialization)
* [Importing \* From a Package](https://realpython.com/python-modules-packages/#importing-from-a-package)
* [Subpackages](https://realpython.com/python-modules-packages/#subpackages)
* [Conclusion](https://realpython.com/python-modules-packages/#conclusion)