

**GLS UNIVERSITY**  
**Faculty of Computer Applications & IT**  
**Integrated MCA**

**221601501 Introduction to Python**

**Theory Assignment Unit – 1**

**Q – 1 Answer the following:**

1. List the features of Python
2. List few applications of Python
3. Explain basic Python Program structure
4. List the points to be considered for declaring Python variables.
5. List the points to be considered for Python Constants.
6. How to cast a datatype for Python variables?

**Q – 2 Fill in the blanks:**

1. The implementation of Python was started in \_\_\_\_\_.
2. Python 1.0 was released in the year \_\_\_\_\_.
3. Python 3.0 is also called \_\_\_\_\_.
4. \_\_\_\_\_ programming language is said to be the predecessor of Python language.
5. \_\_\_\_\_ Mode is used when an user wants to run one single line or one block of code.
6. \_\_\_\_\_ Mode used when an user wants to run multiple line of codes
7. \_\_\_\_\_ is used to note comment.
8. Comments can be used to make the code more readable. (True/ False)
9. Variables are containers for storing data values. (True/ False)
10. Syntax of variable declaration is \_\_\_\_\_.
11. Variables do not need to be declared with any particular type. (True/ False)
12. The data which is being assigned to the variables are called as \_\_\_\_\_.

**Q – 3 Explain following string functions in Python:**

- |                |                   |                 |
|----------------|-------------------|-----------------|
| 1. strip ( )   | 6. capitalize ( ) | 11. isalnum ( ) |
| 2. lower ( )   | 7. count ( )      | 12. isdigit ( ) |
| 3. upper ( )   | 8. index ( )      | 13. islower ( ) |
| 4. replace ( ) | 9. find ( )       | 14. isupper ( ) |
| 5. split ( )   | 10. isalpha ( )   |                 |

**Q – 4 Explain following math functions in Python:**

- |                  |              |             |
|------------------|--------------|-------------|
| 1. ceil ( )      | 6. log2 ( )  | 11. sin ( ) |
| 2. factorial ( ) | 7. log10 ( ) | 12. tan ( ) |
| 3. floor ( )     | 8. pow ( )   | 13. pi      |
| 4. fmod ( )      | 9. sqrt ( )  | 14. e       |
| 5. exp ( )       | 10. cos ( )  |             |