Pre Assessment Test

1. Which GUI comes in-built as an interactive shell with Python?
- PGUI
- Pyshell
- PythonSh
- IDLE

2. IDLE stands for _____
- Integrated Development and Learning Environment
- Integrated Developers Local Environment
- Internal Developers Environment
- Integrated Development Lab for Python

3. Which function is used to display specified messages on the screen?
- display
- print
- run
- format
- output

4. Which of the following are Assignment Operators?
- +=
- =
- -=
- <<
- ~

5. Which of the following are correct?
- a=b:b=10
- a=b=c=10
- a=b;b=c;c=20
- a & b & c = 40
- a,b,c = 10,20,30
- a=10,b=a,

6. Which of the following are correct Python Comments?
- //This is a Python Comment
- /This is a Python Comment
- /* This is a Python Comment */
- # This is a Python Comment
- """" This is a Python Comment """"

- ''' This is a Python Comment '''
7. A user-specified inputs can be assigned to a variable with the help of following function:
- enter
- userinput
- input
- value
- prompt
- examine

8. What is the type of User Input data?
- Integer
- String
- Floating Point
- Boolean

9. The print() function adds following invisible character at the end of the line by default:
- \t
- \n
- \s
- \r

10. What will be the output of following program ?

A = 9

B = 3

Print(A/B)

- 3
- 3.0
- 0
- 1
- 27
- 27.0

11. What will be the output of following program?

```
a = 17
b = 4
print(a//b)
```

- 4.0
- <mark>4</mark>
- 16
- 16.0
- 8
- 8.0

12. What will be the output of following program?

```
a = 17
b = 5
a += b
print(a)
```
- 17
- 5
- 17.0
- 5.0
- <mark>22</mark>
- 22.0

13. Which of the following statements are correct?
- <mark>Python is an interpreted language</mark>
- <mark>Python is a high level programming language</mark>
- Python is compiled language
- Python program is compiled before it is interpreted

14. Which of the following statement is correct?
- <mark>List is mutable and Tuple is immutable</mark>
- List is immutable and Tuple is mutable
- Both List and Tuple are mutable
- Both List and Tuple are immutable

15. Data Analysis is a process of?
- Inspecting the data
- Cleaning the data
- Transforming the data
- All of the above

16. Which of the following is true about hypothesis testing?
- Answering yes/no questions about the data
- Estimating numerical characteristics about the data
- Describing associations within the data
- Modelling relationships within the data

17. What is true about data mining?
- Data Mining is defined as the procedure of extracting information from huge sets of data
- Data mining also involves other processes such as Data Cleaning, Data Integration, Data Transformation
- Data mining is the procedure of mining knowledge from data
- All of the above

18. The mapping or classification of a class with some predefined group or class is known as?
- Data Characterization
- Data Discrimination
- Data Set
- Data Sub Structure

19. _____ may be defined as the data objects that do not comply with the general behavior or model of the data available.
- Outlier Analysis
- Evolution Analysis
- Prediction
- Classification

20. What is the use of data cleaning?
- To remove the noisy data
- Correct the inconsistencies in the data
- Transformations to correct the wrong data
- All of the above

21. The goal of business intelligence is to allow easy interpretation of large volumes of data to identify new opportunities.
- **True**
- False
- Can be True or False
- Cannot Say

22. Text Analytics, also referred to as Text Mining?
- **True**
- False
- Can be True or False
- Cannot Say

23. _____ are used when you want to visually examine the relationship between two quantitative variables.
- Bar Graphs
- Pie Graphs
- Line Graphs
- **Scatter Plots**

24. Which of the following is not a major data analysis approaches?
- Data Mining
- **Predictive Intelligence**
- Business Intelligence
- Text Analytics

25. A graph that uses vertical bars to represent data is called a ___
- Line Graph
- **Bar Graph**
- Scatterplot
- Vertical Graph

26. Which of these distributions is used for a testing hypothesis?
- Normal Distribution
- **Chi-Squared Distribution**
- Gamma Distribution
- Poisson Distribution

27. Select programming languages used in data science that are open source.
- R
- Python
- SAS
- <mark>All of the above</mark>

28. What is reinforcement learning (RL)?
- It is a type of machine learning that aims to find a function that maps input to output based on labelled data
- <mark>It is a branch of machine learning that is concerned with how intelligent agents ought to take actions in an environment in order to maximise cumulative reward</mark>
- It is a type of machine learning that aims to discover new patterns in a data set

29. What is the activation function for?
- The activation function is used to introduce linearity in neural network
- It is used only in last layer of neural network to calculate final results of the model
- <mark>It is used to introduce non linearity in the neural network helping it to learn more complex function. Without the activation function neural network would be able to learn linear function, which is linear combination of inputs</mark>

30. What is variance?
- <mark>Variance is a measure of the dispersion of a random variable, which means that it is a measure of how far the values of a random variable are distributed from its mean value</mark>
- Variance is a value that appears mostly in set of data values
- Variance is a measure of central tendency. It is the value of the feature that divides the ordered statistical population into two equal parts in such a way there are two equal observations below and above this value