**Each Questions Contains 5Marks 10x5=50**

**1.Define Data and Different types of Data?**

**2.Define DataScience and Application of DataScience?**

**3.Benfits of DataScience?**

**4.What is HealthCare Analytics?**

**5.What is Data analytics in health care?**

**6.Explain about Predictive analytics in health care?**

**7.Explain Benefits of data analytics in health care?**

**8.Explain About Social media analytics and Uses?**

**9.Define Numpy,Pandas and Matplotlib?**

**10.What is DataVisulization? and Explain about different Charts?**

**Multiple Choice Questions**

**Each Questions Contains 2marks**

**1. What does NumPy stand for?**

a) Numerical Python  
b) Natural Python  
c) Numeric Program  
d) Nonlinear Python

**2. What is the default data type of NumPy arrays?**

a) int32  
b) float64  
c) object  
d) None of the above

**3. What is the output of the following code?**

import numpy as np  
a = np.arange(10)  
print(a[2:5])

a) [2, 3, 4]  
b) [0, 1, 2]  
c) [5, 6, 7]  
d) [2, 4, 6]

**4. What is the output of the following code?**

import numpy as np  
a = np.array([[1, 2], [3, 4]])  
print(a)ndim)

a) 0  
b) 1  
c) 2  
d) 3

**5. Which of the following is used to find the maximum element in a NumPy array?**

a) max()  
b) maximum()  
c) amax()  
d) All of the above

6. **Which of the following input can be accepted by DataFrame?**a) Structured ndarray  
b) Series  
c) DataFrame  
d) All of the mentioned

7. **Which of the following is used for machine learning in python?**a) scikit-learn  
b) seaborn-learn  
c) stats-learn  
d) none of the mentioned

8. **What will be the output of following code?**

import pandas as pnd

pnd.Series([1,2], index= ['a','b','c'])

a)Syntax Error

b)Index Error

c)Value Error

d)None of the above mentioned

9. **What is Matplotlib?**

a) A programming language  
b) A data visualization library  
c) A database management system  
d) An operating system

10.**What is the purpose of Matplotlib’s pyplot module?**

a) To create data visualizations  
b) To manage data storage  
c) To manipulate data frames  
d) To install third-party packages

11. Health care data is generally not very useful for decision making?

a. True b. False

12. Health care data can provide different information to different users?

a. True b. False

13. Data quality is most important at the decision-making level?

a. True b. False

14. Lack of training leads to random errors?

a. True b. False

15. The narrative format of physician notes and discharge summaries improves data quality?

a. True b. False

16. To identify quality data, it must conform to a recognized standard?

a. True b. False

17. Suppliers and consumers must agree on data definitions before exchanging information?

a. True b. False

18. Health care data can become obsolete?

a. True b. False

19. Write any two real time applications of healthcare analytics.

20. Write any two real time applications of data science.

21. Write an algorithm to calculate the mean, median and mode. **(10 Marks)**