Module - 2

1. What is predictive analytics? Why are they required? Discuss the leading trends of predictive analytics with examples.
2. Differentiate between regression and classification.
3. Explain how linear regression is used in predictive analytics.
4. Discuss the logistic regression role in predictive analytics.
5. Discuss any 2 techniques used for classification under predictive analytics.
6. Discuss any 2 techniques used for regression under predictive analytics.
7. What are decision trees. Illustrate with examples.
8. Describe the role of decision trees in predictive analytics.
9. Define neural networks. Explain application of neural networks in predictive analytics.
10. Justify the need of having support vector machines for predictive analytics.
11. What are ensemble methods. Discuss.

OR

Describe bagging and boosting concepts in predictive analytics.

OR

Differentiate between bagging and boosting

12. Explain the concept of random forest with an example.
13. Discuss how multiclass classification is carried out.

OR

Explain one-vs-one and one-vs-all methods as applied in multiclass classification.

14. Discuss various performance methods to evaluate classification models.

OR

Describe confusion matrix, accuracy, precision, recall, specificity w.r.t. classification model evaluation.

15. Write a note evaluation methods used for regression models.
16. Differentiate between predictive analytics and descriptive analytics.
17. Explain association rules applied in descriptive analytics.
18. Discuss sequence rules used in descriptive analytics.
19. What is segmentation/clustering. Describe k-means clustering with example.
20. Differentiate between hierarchical and non-hierarchical clustering.