

Reg. No. \_\_\_\_\_ Name: \_\_\_\_\_

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**  
**FOURTH TRIMESTER MBA DEGREE EXAMINATION MAY 2018**

**MBA 42-BUSINESS ANALYTICS**

Max. Marks: 60

Duration: 3 Hours

**Part A**

*Answer all questions. Each question carries 2 marks*

1. What is big data? Give example.
2. Describe risk analysis.
3. Explain concept of Attrition and Retention analytics.
4. What is social media and social media mining?
5. What is perceptual mapping?

**Part B**

*Answer any 3 questions. Each question carries 10 marks*

6. **a)** What are statistical models? What are different types of models used in business analytics? (5)  
**b)** A bank developed a model for predicting the average checking and savings account balance as  

$$\text{Balance} = -17,732 + 367 \times \text{age} + 1,300 \times \text{years education} + 0.116 \times \text{household wealth.}$$
    - i) Explain how to interpret the numbers in this model. (2)
    - ii) Suppose that a customer is 32 years old, is a college graduate (so that years education = 16), and has a household wealth of Rs 150,000. What is the predicted bank balance? (3)
  7. **a)** What is demand forecasting? Explain relevance of demand forecasting for business. (5)  
**b)** Illustrate important demand forecasting methods. (5)
  8. **a)** What does skill gap analytics mean? Explain with examples. (5)  
**b)** The Institute for Climate Change Studies has conducted training for LSG functionaries integrating local level planning with Climate Change Disaster Risk Reduction [CCDRR]. Out of 978 Grama Panchayath in Kerala, 526 incorporated 10 percent CCDRR in their annual budget in 2015. The above panchayaths could save Rs 200 for every Rs 1000 spend for flood mitigation during 2017. Illustrate the concept of training and Learning analytics with the above example. (5)
  9. **a)** What is market segmentation? Give types of segments. (5)  
**b)** Give brief note on cluster analysis in segmentation. (5)
  10. **a)** Write a note on inventory modeling. (5)  
**b)** Write a note on multi dimensional scaling. (5)
- Part C**
- Compulsory question, the question carries 20 marks*
11. A. What are different classes of predictive analytics? Explain with examples. (5)  
 B. What is predictive modeling? (5)  
 C. Illustrate different types of predictive models. (10)