# Tutorial 1

1. Define the term Business Intelligence (BI) using your own words.
2. By using the diagram, explain the framework for business intelligence
3. What are the major similarities and differences of DSS and BI?
4. Describe the BI cycle.
5. What are benefits of BI?
6. Differentiate between MIS, DSS and ESS.
7. List down different types of users.
8. Compare differences between conventional systems and BI.

# Tutorial 2

1. List the steps of intelligence creation and use.
2. What is BI governance?
3. What are the steps that the enterprises must do to be success in today's business environment?
4. Define online transaction processing (OLTP)?
5. Define online analytical processing (OLAP)?
6. Describe the information factory.
7. Why there is strategic imperative to BI?
8. What is competitive intelligence?
9. How can BI provide a competitive advantage in an industry?
10. How can BI help in sustaining competitive advantage?

# Tutorial 3

1. Define strategic intelligence.
2. Give an example of strategic intelligence.
3. Define tactical intelligence.
4. Give an example of tactical intelligence.
5. Define operational intelligence.
6. Give an example of operational intelligence.
7. Define financial intelligence.
8. Give an example of financial intelligence.

# Tutorial 4

1. Define data mining. Why are there many different names and definitions for data mining?
2. What are the key differences between the major data mining methods?
3. What are the major application areas for data mining?
4. List and briefly define the phases in the CRISP-DM process.
5. What are the main data preprocessing steps? Briefly describe each step and provide relevant examples.
6. How does CRISP-DM differ from SEMMA?
7. Give examples of situations in which classification would be an appropriate data mining technique. Give examples of situations in which regression would be an appropriate data mining technique.
8. List and briefly define at least two classification techniques.

# Tutorial 5

1. Differentiate among a data mart, an ODS, and an EDW.

2. What are the key similarities and differences between a two-tiered architecture and a three-tiered architecture?

3. List the alternative data warehousing architectures discussed in this section.

4. What issues should be considered when deciding which architecture to use in developing a data warehouse? List the 10 most important factors.

5. Why is the ETL process so important for data warehousing efforts?

6. Describe the major similarities and differences between the Inmon and Kimball data warehouse development approaches.

7. What are the major differences between a traditional data warehouse and an RDW?

8. What steps can an organization take to ensure the security and confidentiality of customer data in its data warehouse?

# Tutorial 6

1. Relate BA to data warehousing.
2. Define OLAP and compare it to OLTP.
3. What is meant by slice-and-dice?
4. Define predictive analysis and describe its capabilities.
5. Define data visualization and list its major advantages.
6. Why is the combination of GIS and GPS so useful?
7. Define ADS system and describe the benefits of ADS.
8. List the five reasons why BI projects fail.

# Tutorial 7

1. What is an ANN?
2. Explain the following terms: neuron, axon, and synapse.
3. Briefly describe back-propagation.
4. List the nine steps in conducting a neural network project.
5. List some of the different types of neural networks.
6. What is artificial intelligence?
7. What are heuristics? Give an example.

# Tutorial 8

1. What is an expert system?
2. Using the diagram, explain the components of expert systems?
3. Explain with TWO (2) reasons why people need to use expert systems.
4. Compare conventional system and expert systems.
5. Explain the problems and limitations faced by an expert system.
6. List down the success factors of an expert system.

# Tutorial 9

1. Describe the four steps of the CBR process. Briefly discuss each step.
2. Describe in detail three genetic algorithm applications.
3. Define NLP and list its major types.
4. What is a fuzzy neural network? Give an example of an application of a fuzzy neural network.
5. Describe the Web-based intelligent systems and their unique features.
6. Describe the different intelligence levels of software agents.
7. List the major benefits of IA.
8. Define recommendation agent and describe the role of these agents in e-commerce.

# Tutorial 10

1. Define BPM.
2. List the major BPM processes.
3. What is the primary goal of a financial plan?
4. What is management by exception?
5. What are the characteristics of an effective performance measurement system?
6. What are the three key elements of a BPM system architecture?
7. What is the major difference between a scorecard and a dashboard?
8. Define BAM.

# Tutorial 11

1. List and explain the characteristics of Enterprise IS.
2. Describe the 3 types of business processes.
3. Discuss the definition and the characteristics of OLAP.
4. Describe the major components of Executive IS.
5. Elaborate 3 aspects of CRM.
6. Discuss the purpose and the components of SCM.
7. List and explain the disadvantages of ERP.
8. Define PLM and discuss its phases.

# Tutorial 12

1. What are the major types of BI implementation influencing factors?
2. List the managerial issues related to BI.
3. List two types of integration in BI.
4. Describe the need for BI integration.
5. Describe integration of BI and non-BI system.
6. What is on Demand BI?
7. What are the limitations of on Demand BI system?
8. List some legal issues of BI.