

Duration: 3(Three) Hours

Total Marks assigned to the Paper: 80

Instructions to the candidates, if any: ---

N.B.: (1) Question No. 1 is compulsory.

(2) Attempt any **Three** questions out of remaining **Five** questions.

(3) Assume suitable data if necessary.

Q.1 Answer the following:

[20]

- A) What is Lazy Learner? Explain how it is different from Eager Learners?
- B) What are colossal patterns? How they are useful in pattern mining?
- C) What is data mining? How is data mining related to BI?
- D) Data mining is a way for companies to develop business intelligence from their data to gain a better understanding of their customers and operations and to solve complex organizational problems? Justify.

Q.2 A) Compare and contrast the following:

[10]

- (i) Clustering and Classification      (ii) Bagging and Boosting

Q.2 B) What are Bayesian Belief networks? Explain with an example?

[10]

Q.3 A) What is pattern mining? Explain constrain based pattern mining?

[10]

Q.3 B) What is dashboard? How it different from scoreboard? Prepare a balanced scoreboard by investigating student needs to facilitate College to enhance educational service quality by reviewing the old operating activity: student attendance, teaching methodology, process of examination, and placement perspective.

[10]

Q.4 A) List different advanced clustering techniques applicable to data mining. Explain density based clustering?

[10]

Q.4 B) How clustering is applied to graph and network data? What are the different applications and challenges of clustering graph and network data?

[10]

Q.5 A) Explain BI architecture. Illustrate characteristics and benefits of BI?

[10]

Q.5 B) Does Business Intelligence (BI) works with existing applications and databases? How can Business Intelligence (BI) be useful to an organization? Which industries can benefit from BI?

[10]

Q.6 Write short note on the following: (ANY TWO)

[20]

- A) Text Mining For BI
- B) Forecasting methods in BI
- C) Data Cube Technology

---X---X---

QP Code : 1743

(3 Hours)

[Total Marks : 80]

- N.B. : (1) Question No.1 is compulsory.  
(2) Solve any three questions out of remaining five questions.  
(3) Assume suitable data if required.

1. a) Explain key benefits of information life cycle management, along with characteristics of ILM. 10  
b) Explain disk drive components with neat diagram. 10
2. a) Explain storage virtualization with suitable figure. List two suitable applications for the same. 10  
b) Explain various FC ports with neat diagram. 10
3. a) Explain BC life cycle. 10  
b) Give the detail view of IR system. 10
4. a) Discuss the inter operability of FC SAN 10  
b) Explain real time data sharing. 10
5. a) Explain retrieval and storage in CAS. 10  
b) Explain remote replication technology in brief. 10
6. Write short note: 20
  - a) RAID technology.
  - b) Failure analysis.
  - c) Vector model.
  - d) NAS.



# ME / SEM-I / CBSGS / IT / Network Design & Management /

QP Code : 1614

(Time: 3 hours)

(Total Marks: 80)

May-15

1. Question No 1 is compulsory.
2. Attempt any three out of the remaining five questions.

- Q1. (a) What are some typical technical goals and business goals for organizations today? Define bandwidth, throughput and latency of a network. 10
- Q 1 (b) What are the main phases of network design as per the PDIOO approach? What are the goals and functions of the distribution layer? 10
- Q2. (a) What is the relevance of queuing theory in network design? Discuss M/M/1 queuing model. 10
- Q2.(b) What are the key features of the distribution layer? What is the advantage of using a layer-3 switch in the core of a campus network? Can a layer-2 switch be used instead? Why or why not? 10
- Q3 (a) What are the challenges of a network manager? How are fault management and performance management handled by an NMS? 10
- Q3(b) Explain the difference between the database of a network management system and its MIB. Discuss the structural differences between SMI and MIB. 10
- Q4. (a) What is the necessity of TMN? Discuss the functional model of TMN along with its applications and limitations. 10
- Q4. (b) What is remote monitoring? Explain the RMON MIB framework. 10
- Q5 (a) Discuss Information model of SNMP. What are managed objects? How are they defined? 10
- Q5 (b) Describe the architecture of SNMP. Discuss SNMP community and community profile. 10
- Q6. Short notes on: (any two)
- i) ASN.1 notation 20
  - ii) Ethernet Design rules and scalability constraints
  - iii) TMN Cube