

(b) What is clustering ? Write the different categories of clustering methods. Discuss. 8

9. Explain the following :

(a) Bayesian classification 8

(b) Spatial Data Mining 8

Roll No. ....

**67172**

**MCA 4th Semester (With New Notes)  
Examination – May, 2018**

**DATA WAREHOUSING & MINING (New)**

**Paper : MCA-402**

*Time : Three Hours ]*

*[ Maximum Marks : 80*

*Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.*

*Note : Question No. 1 is compulsory. Apart from it, attempt four questions in all by selecting one question from each Unit. All questions carry equal marks.*

1. (a) What is clean data ?
- (b) What are fact tables ?
- (c) What do you mean data cubes ?
- (d) What is MOLAP ?

- (e) What are data mining processes ?
- (f) What is association rule mining ?
- (g) What is web mining ?
- (h) What are Grid-based mining ? 8 × 2 = 16

**UNIT -**

- 2. (a) What do you mean by data mining ? Why is it needed ? What strategies are used for the purpose ? Explain. 8
- (b) What is data warehouse (DWH) ? Why we need DWH ? What are its goals ? Discuss. 8
- 3. Explain the following :
  - (a) Data Mart 8
  - (b) DWH Architecture 8

**UNIT -**

- 4. What do you understand by OLAP technology ? What are capabilities of OLAP ? What are different OLAP operations ? Illustrate with suitable examples. 16

- 5. What is ROLAP ? How do you compare it with HOLAP ? Discuss their pros and cons along with justification. 16

**UNIT - III**

- 6. (a) What do you mean by constraint-based association mining ? Illustrate its usefulness. 8
- (b) What is data mining ? Briefly describe the components of a data mining system. 8
- 7. (a) What is the concept of hierarchy generation ? How does it help ? Illustrate. 8
- (b) What are multi-dimensional association rules ? How these rules are mined from relational databases ? Explain. 8

**UNIT - IV**

- 8. (a) What do you understand by classification and prediction ? What is classification by decision induction ? Discuss its relevance. 8