

3C. The following table consists of training database. The data have been generalized. Let Plays(P or N) be the class label attribute.

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Outlook	Temperature	Humidity	Windy	Class
sunny	hot	high	false	Ν
sunny	hot	high	true	N
overcast	hot	high	false	P
rain	mild	high	false	P
rain	cool	normal	false	P
rain	cool	normal	true	N
overcast	cool	normal	true	P
sunny	mild	high	false	N
sunny	cool	normal	false	P
rain	mild	normal	false	P
sunny	mild	normal	true	P
overcast	mild	high	true	P
overcast	hot	normal	false	P
rain	mild	high	true	N

Predict the class for the data tuple $X = (\langle rain, hot, high, false \rangle)$ using Naïve Bayesian Classifier.

4A. Explain the different measures of information retrieval effectiveness.	3M	
4B. Explain the following information retrieval terminologies		
i) Relevance feedback. ii) transfer of prestige		
4C. Consider the relational schema shown below.	4M	
EMPLOYEE (PERSON-NAME, STREET, CITY)		
WORKS (PERSON-NAME, COMPANY-NAME, SALARY)		
COMPANY (<u>COMPANY-NAME</u> , CITY)		

MANAGES (PERSON-NAME, MANAGER-NAME)

i)Give a schema definition in SQL corresponding to the relational schema, but using references to express foreign-key relationships (Use inheritance where appropriate).

- ii) Find the company with the most employees.
- iii) Find those companies whose employees earn a higher salary, on average, than the average salary at First Bank Corporation.
- 5A. Write semi-join algorithm. Write semi-join strategy for the following relations and 4M compute $r \ltimes s$ for the relations of Figure. Assume that the relation r is stored in site B1 and s in B2.

А	В	С	Γ	С	D]
1	2	3		3	4	
4	5	6		3	6	1
1	2	4		2	3	2
5	3	2		1	4	1
8	9	7		1	2	3

5B. Explain the aspects need to be addressed when adding persistence support to C++.	3M
5C. Explain the different element notations used in XML document type definition.	3M
6A. Explain the XQuery structure with an example.	3M

- 6B. List and explain the problems and future issues in GIS. 3M
- 6C. Explain the nature of multimedia data and its applications.

4M

4M