

DBMS

23



BX-0784

Seat No. \_\_\_\_\_

Second Year B. C. A. (Sem. III) Examination

April / May - 2006

DBMS (302)

Time : Hours] \_\_\_\_\_

[Total Marks : 70

Instructions :

(1)

नीचे दशविवेक निशानवाणी विगतो उत्तरवही पर अवश्य लपवी.  
Fillup strictly the details of signs on your answer book.

Name of the Examination :

Name of the Subject :

Subject Code No. :    Section No. (1, 2,.....) :

Seat No. :

Student's Signature \_\_\_\_\_

1 Answer the following questions : 12

- (a) Define DBMS.
- (b) List the functions of a file manager.
- (c) Give eg. example of DDL, DML and DCL.
- (d) What do you understand by 'Data Independence'.
- (e) How, is drop different from delete?
- (f) What is a NULL value?

2 Answer in detail : (any three) 18

- (a) Define 'Multivalued dependency.' What problem it creates Explain with example. What methods are applied to overcome it ?
- (b) Explain the structure of DBMS.
- (c) Discuss the disadvantages of a file processing system.
- (d) Define Normalization? With an example, try to normalize upto 3<sup>rd</sup> Normal form.

- 3 Design a 'Generalization specialization hierarchy for following : 8
- (a) A college runs courses like BCA, BBA, B.Com. B.Ed. B.Sc. Each course has its own attributes, staff. Staff for English and Mathematics are common. The administrative staff is common for all the courses. Certain employees are permanent and adhoc. Permanent employees are given salaries at the end of the month whereas weekly wages are paid to temporary staff depending on their number of hours.
- (b) Explain the distinction among various types of keys like primary key, candidate key, super key, unique key and foreign key along with example. 6
- 4 Explain in detail : (any two) 14
- (a) Explain the various kinds of integrity constraints and how can you implement them in database.
- (b) Discuss the advantages and disadvantages of DBMS. What is good criteria of performing decomposition with example ?
- (c) Explain in detail how data are abstracted in DBMS.
- 5 Consider the following tables and answer the queries : 12
- (a) List the employees whose name starts with 'A'
- (b) List all the employees whose Hiredate is 1<sup>st</sup> June 1995.
- (c) List the employees whose salary is maximum in each department.
- (d) Count the number of employees working in 'System department of Bombay.
- (e) List the employees whose salary is > Rs. 5000 and < Rs. 12,000.
- (f) Calculate average, minimum, maximum salaries of employees for the employees who are programmer.