

**M.C.A. DEGREE EXAMINATION, MAY - 2015**

**First Year**

**Paper - VI : DATABASE MANAGEMENT SYSTEMS**

**Time : 03 Hours**

**Maximum Marks : 75**

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**SECTION-A**

**(3 x 15 = 45)**

**Answer Any Three of the following**

- 1) Explain the working of the sequential file organization with an example and write the steps of creating an indexed sequential file.
- 2) How will you map a conceptual data model into a relational data model? Give suitable example.
- 3) Explain the following with an example:
  - i) BCNF
  - ii) LAM
- 4) Explain about various DML retrieval and modification commands.
- 5) Decrypt the following stream of data using the tree with a degree 2 and three levels:  
(a, b, d, h, i, e, j, k, c, f, l, m, g, n, o)

**SECTION-B**

**(5 x 5 = 25)**

**Answer Any Five of the following**

- 6) What are the advantages of database system/approach? Explain them in brief.
- 7) Illustrate the construction and working of hashed file organization with an example.
- 8) Write an algorithm to construct a B-tree.
- 9) What is an E-R diagram? Explain it with an example.
- 10) Explain about different basic actions performed over databases.

11) Explain the following PC-FOCUS commands:

i) FILETALK

ii) TABLETALK

12) What is DDL? Give a skeleton of the DDL program of IDMS.

13) What is deadlock/deadly embrace? Illustrate it with an example.

**SECTION-C**

**(5 x 1 = 5)**

**Answer All of the following**

14) What are the components of DSS?

15) What is inter-record data structure?

16) What is normalization?

17) What is the use of GET HOLD NEXT command?

18) What is timestamp?

