D 9917 **(Pages : 2)** **Name**.....

Reg. No.....

THIRD SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2010

(CCSS)

Computer Science—Complementary Course

CMCA 03—FUNDAMENTALS OF SYSTEM SOFTWARE, NETWORK AND DBMS

Time : Three Hours Maximum Weightage : 30

I. Answer *all* questions :

1 _____ is an example of system software.

2 A software which translates assembly language program to machine language is called a

3 A_____ takes one statement of the high Level Language program, translates it into machine level instructions, and then execute the resulting machine language instruction immediately.

4 _____ use very high frequency radio signals to transmit data through space.

5 WAN stands for _____

6 A _____ is a set of formal operating rules, procedures, or convention that govern a given process.

7 In relational model, data are stored in _____

8 Data in the network model are represented by a collection of _____

9 UPDATE command is used for _____

10 _____ command is used to remove an entire table from the data base.

11 HTML documents are defined by HTML _____

12 HTML links are define with the _____ tag.

(12 x = 3 weightage)

II. Answer *all* questions :

13 List any *four* functions of an operating system.

14 Write any *four* examples of High Level Languages.

15 What is a LAN ?

16 What are the layers of Internet protocol.

17 Define data rate.

18 Define DBMS.

19 List four advantages of DBMS.

20 Write and explain the syntax of SELECT command.

21 Define hypermedia.

= 9 weightage)

Turn over

III. Answer any *five* questions :

22 Differentiate between batch, multiprogramming, time sharing and real-time systems.

23 Compare Machine Language, Assembly Language and High Level Language.

24 Briefly explain the functions of various layers of OSI model.

25 Write important features of Fibre optic and Microwave communication media.

26 Briefly explain the features of hierarchical data model.

27 Write SQL statements for the following :—

(a) Create a table with book-no, title, author-name and price. (book-no as primary key).

(b) Add a new field "edition" to the above table.

(c) Add a sample record.

28 Write note on HTML lists.

(5 x 2 = 10 weightage)

IV. Answer any *two* questions :

29 With neat diagrams, discuss network topologies.

30 With suitable example, explain relational data model. List the advantages of relational model over other models.

31 Create an HTML document to generate a web page of your choice. Include as many features as possible.

(2 x 4 = 8 weightage)