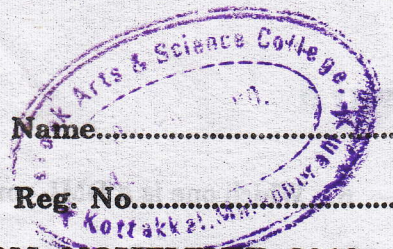


D 71670

(Pages : 3)



**THIRD SEMESTER B.A./B.Sc. DEGREE EXAMINATION, NOVEMBER 2019**

(CUCBCSS—UG)

Computer Science

BCS 3C 03—FUNDAMENTALS OF SYSTEM SOFTWARE, NETWORK AND DBMS

(2014 Admission)

Time : Three Hours

Maximum : 80 Marks

**Part A**

*Answer all questions.  
Each question carries 1 mark.*

1. \_\_\_\_\_ programming language uses mnemonics and opcodes.

- (a) High level.
- (b) Machine level.
- (c) Assembly.
- (d) Hybrid.

2. An example for unguided media is \_\_\_\_\_.

- (a) Microwave.
- (b) Twisted pair.
- (c) Co-axial cable.
- (d) Optic Fiber.

3. The expansion for WAN is \_\_\_\_\_.

- (a) Wireless Area Network.
- (b) Wide Area Network.
- (c) Wireless Access Network.
- (d) Wired Area Network.

4. \_\_\_\_\_ is the tag used for drawing a horizontal line in an HTML document.

- (a) <HOR>.
- (b) <HR>.
- (c) <HL>.
- (d) <HT>.

5. Which is not a Web browser ?

- (a) Google Chrome.
- (b) Firefox Mozilla.
- (c) Internet Explorer.
- (d) MS-SQL server.

**Turn over**

6. Which one is a DML command in DBMS ?

- (a) Create. (b) Insert.  
(c) Delete. (d) Select.

7. The tag used for making a text bold is \_\_\_\_\_.

- (a) <b>. (b) <bl>.  
(c) <bd>. (d) <bo>.

8. Which programming language given below uses an interpreter ?

- (a) C. (b) C++.  
(c) Python. (d) Fortran.

9. An example for empty tag is \_\_\_\_\_.

- (a) <h1>. (b) <br>.  
(c) <b>. (d) <font>.

10. Error detection and correction is done at \_\_\_\_\_ layer.

- (a) Network. (b) Physical.  
(c) Data Link. (d) Transport.

(10 × 1 = 10 marks)

### Part B

*Answer all questions.*

*Each question carries 2 marks.*

11. What do you mean by distributed operating system ?  
12. Explain the difference between a compiler and assembler.  
13. Explain various heading tags used in HTML.  
14. What is the difference between DELETE and DROP commands in DBMS ?  
15. How will you insert an image into an HTML document ?

(5 × 2 = 10 marks)

**Part C**

*Answer any five questions.  
Each question carries 4 marks.*

16. Explain the ALTER command with syntax and example.
17. What are the functions of an operating system ?
18. Explain the five layers of Internet.
19. Explain the working of microwave media.
20. What do you mean by batch processing concept ?
21. Mention the goals of networking.
22. Explain with example primary key and foreign key in DBMS.
23. Explain the advantages of high level programming languages.

(5 × 4 = 20 marks)

**Part D**

*Answer any five questions.  
Each question carries 8 marks.*

24. Explain the features of multiprogramming and timesharing operating systems.
25. Explain with diagram, the various layers in OSI model.
26. Write short notes on the following :—
  - (a) Twisted pair.
  - (b) Fiber optics.
27. Explain with examples various DDL commands in DBMS.
28. Explain the advantages and disadvantages of the following DBMS
  - (a) Hierarchical model.
  - (b) Relational model.
29. Explain the structure of an HTML document with an example.
30. Explain with example the tags used for creating ordered and unordered lists.
31. Explain various network topologies.

(5 × 8 = 40 marks)

**D 43233**

**(Pages : 2)**

**Name.....**

**Reg. No.....**

**SECOND SEMESTER B.Sc. DEGREE EXAMINATION, MAY 2018**

**(CUCBCSS-UG)**

**Complementary Course**

**BCS 2C 02 – FUNDAMENTALS OF SYSTEM SOFTWARE, NETWORK AND DBMS**

**(2017 Admissions)**

**Time : Three Hours**

**Maximum : 64 Marks**

**Part A**

**Answer all questions.**

**Each question carries 1 mark.**

1. Translator for low level programming language were termed as :
  - (a) Assembler.
  - (b) Compiler.
  - (c) -Linker.
  - (d) Loader.
2. Process is :
  - (a) Program in High level language kept on disk.
  - (b) Contents of main memory.
  - (c) A program In execution.
  - (d) A job in secondary memory.
3. What transmission media has the highest transmission speed in a network ?
  - (a) Coaxial cable.
  - (b) Twisted pair cable.
  - (c) Optical fiber.
  - (d) Electrical cable.
4. Terminators are used in \_\_\_\_\_ topology.
5. Which command is used to retrieve a record from the database?
6. What is DML?
7. The tag that allows you to add a row in a table \_\_\_\_\_.
8. What should be the first tag in any HTML document?
9. Which tag is used to mark a beginning of paragraph?

**(9 × 1 = 9 marks)**

**Turn over**

**Part B**

*Answer all questions.*

*Each question carries 2 marks.*

10. What is an assembler?
11. What are the functions of OS?
12. What is Database Management System?
13. What is the command to alter the value of an attribute in SQL?
14. What is HTML?

(5 × 2 = 10 marks)

**Part C**

*Answer any five questions.*

*Each question carries 5 marks.*

15. Explain different types of Operating System.
16. What advantages do compilers have over interpreters?
17. What is an operating system? Why it is necessary for a computer system?
18. What is data model? Explain different types of models.
19. What is SQL? How it is useful?
20. Explain different DDL commands in SQL.
21. Differentiate between a LAN and WAN. Write one example of each.
22. Explain any *five* HTML tag with example.

(5 × 5 = 25 marks)

**Part D**

*Answer any two questions.*

*Each question carries 10 marks.*

23. Explain the classification of programming language. What are the advantages and limitations of High-level languages?
24. Describe the various layers of the OSI model of network architecture with functions of each layer.
25. Explain general structure of HTML document and different types of elements in HTML.

(2 × 10 = 20 marks)

**THIRD SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2016**

(CUCBCS3-UG)

Complementary Course

BCS 3C 05 - FUNDAMENTALS OF SYSTEM SOFTWARE, NETWORK AND DBMS

Time : Three Hours

Maximum : 64 Marks

**Part A***Answer all questions.**Each question carries 1 mark.*

1. Define System software.
2. Command to remove a relation from SQL database.
3. Who proposed the relational model?
4. How to define a target in new page in HTML?
5. The attribute that can be divided in another attributes are called \_\_\_\_\_.
6. Which layer is responsible for process to process delivery?
7. A list of protocols used by a system, one protocol per layer, is called \_\_\_\_\_.
8. \_\_\_\_\_ manages a group of independent computers and makes them appear to be a single computer.
9. \_\_\_\_\_ acts as an interface between user and computer.

(9 × 1 = 9 marks)

**Part B***Answer all questions.**Each question carries 2 marks.*

10. Mention some advantages of assembly language over machine language.
11. What is the use of FONT tag? Explain with its attributes?
12. How assembler is different from compiler and interpreter?
13. List the advantages of bus topology.
14. Define Primary key. Give an example.

(5 × 2 = 10 marks)

**Part C***Answer any five questions.**Each question carries 5 marks.*

15. What is computer network and explain its types?
16. Explain body tag with all its attributes.

Turn over

17. How is token ring network works? In what ways is it different from Ethernet?
18. Write short notes on :
  - (a) Table.
  - (b) List.
19. Differentiate between fibre optic, co-axial and twisted pair cable.
20. What is SQL? What are its advantages and disadvantages?
21. Describe ACID property in detail.
22. Write short note on Data Manipulation Language (DML).

(5 × 5 = 25 marks)

#### Part D

*Answer any two questions.*

*Each question carries 10 marks.*

23. Differentiate between ISO-OSI and TCP/IP reference model.
24. What is an operating system? Describe the different types of Operating Systems.
25. Which database model is efficient to handle one to many relationships? Explain with an example.

(2 × 10 = 20 marks)

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(Pages : 2)

Name.....

Reg. No.....

**THIRD SEMESTER B.Sc. DEGREE EXAMINATION  
NOVEMBER 2017**

(CUCBCSS—UG)

Complementary Course

BCS 3C 03—FUNDAMENTALS OF SYSTEM SOFTWARE, NETWORK AND DBMS

Time : Three Hours

Maximum : 64 Marks

**Part A**

*Answer all questions.*

*Each question carries 1 mark.*

1. A program written in machine language is called \_\_\_\_\_ Program.
2. Transmission of computerized data from one location to another is called \_\_\_\_\_.
3. What is the commonly used unit for measuring the speed of data transmission ?
4. To connect a computer with a device in the same room, you might be likely to use \_\_\_\_\_ transmission media.
5. Define Multiprogramming.
6. End-to-end connectivity is provided from host-to-host in which layer of ISO/OSI.
7. Related fields in a database are grouped to form \_\_\_\_\_.
8. What are the serious problems of file management systems ?
9. Which is the device that converts computer output into a form that can be transmitted over a telephone line ?

(9 × 1 = 9 marks)

**Part B**

*Answer all questions.*

*Each question carries 2 marks.*

10. Differentiate machine language from assembly language.
11. What are the main functions of operating system ?
12. What are the types of networks ?
13. What are HTML attributes ?
14. Define SQL.

(5 × 2 = 10 marks)

**Turn over**

**Part C**

*Answer any five questions.  
Each question carries 5 marks.*

- 15. How Interpreter and Compiler differ ?
- 16. Define Data Model.
- 17. What are the different network topologies ?
- 18. Write a note on Coaxial cable.
- 19. What does a drop command do in SQL ?
- 20. What is the use of adding links in HTML ?
- 21. Differentiate between a batch operating System and Multiprogramming OS.
- 22. What are the different HTML Tags ?

(5 × 5 = 25 marks)

**Part D**

*Answer any two questions.  
Each question carries 10 marks.*

- 23. What are Language Processors ? Explain any two.
- 24. Discuss the OSI Model.
- 25. Explain about popular data models used in DBMS.

(2 × 10 = 20 marks)

**THIRD SEMESTER B.Sc. DEGREE (SUPPLEMENTARY/IMPROVEMENT)  
EXAMINATION, NOVEMBER 2015**

(UG—CCSS)

Complementary Course

CS 3C 03—FUNDAMENTALS OF SYSTEM SOFTWARE, NETWORK AND DBMS

Time : Three Hours

Maximum : 30 Weightage

I. Answer all *twelve* questions :

1 Microwaves are :

- (a) Omni directional. (b) Uni directional.  
(c) Bidirectional. (d) None of the above.

2 Delay between job submission and job completion is \_\_\_\_\_.

- (a) Turnaround time. (b) In process time.  
(c) Waiting time. (d) Response time.

3 Which of the following system software always resides in memory ?

- (a) Text Editor. (b) Linker.  
(c) Loader. (d) Assembler.

4 Which tag allows you to add a row in a table ?

- (a) <td> and </td>. (b) <cr> and </cr>.  
(c) <th> and </th>. (d) <tr> and </tr>.

5 For each attribute of a relation, there is a set of permitted values, called the \_\_\_\_\_ of that attribute.

- (a) Domain. (b) Relation.  
(c) Set. (d) Schema.

6 Process to process delivery of the entire message is the responsibility of \_\_\_\_\_.

- (a) Network. (b) Transport.  
(c) Application. (d) Physical.

7 Select \* from employee.

What type of statement is this ?

- (a) DML. (b) DDL.  
(c) View. (d) Integrity constraint.

Turn over

- 8 \_\_\_\_\_ is the structure of the database.
- (a) Table. (b) Relation.  
(c) Schema. (d) None of these.
- 9 Which attribute is used to name an element uniquely ?
- (a) Id. (b) Class.  
(c) Dot. (d) All of the above.
- 10 In the OSI model, encryption and decryption are functions of the \_\_\_\_\_ layer.
- (a) Network. (b) Transport.  
(c) Application. (d) Presentation.
- 11 Choose the correct HTML tag for the largest heading ?
- (a) <H1>. (b) <H6>.  
(c) <H10>. (d) <HEAD>.
- 12 Which one of the following provides the ability to query information from the database and to insert tuples into, delete tuples from, and modify tuples in the database ?
- (a) DML (Data Manipulation Language).  
(b) DDL (Data Definition Language).  
(c) Query.  
(d) Relational Schema.

(12 × ¼ = 3 weightage)

II. Answer *all nine* questions :

- 13 Briefly explain some services provided by the transport layer.
- 14 What is the purpose of cladding in an optical fiber ?
- 15 What do you mean by referential integrity ?
- 16 Write and explain the syntax of DROP command in SQL.
- 17 With the help of example, explain how can we delete a column in DBMS.
- 18 What is the use of <a> tag in html ?
- 19 Explain about line of sight communication.
- 20 Explain different types of networks.
- 21 List and explain basic data types available for attributes in SQL. Give example.

(9 × 1 = 9 weightage)

III. Answer any *five* questions :

- 22 Explain the working of Batch operating system.
- 23 What is the difference between a port address, logical address and physical address ?
- 24 Differentiate between compiler and interpreter.

- 25 With the help of example, explain how tables can be created in HTML.
- 26 Explain the structure of the database system with a neat diagram.
- 27 List advantages and disadvantages of optical fiber.
- 28 Compare twisted pair and coaxial cable.

IV. Answer any two questions :

(5 × 2 = 10 weightage)

- 29 With the help of examples explain the use of following Sql commands :

- (a) CREATE.
- (b) UPDATE.
- (c) ALTER.
- (d) SELECT.

- 30 Explain different network topologies with characteristics.

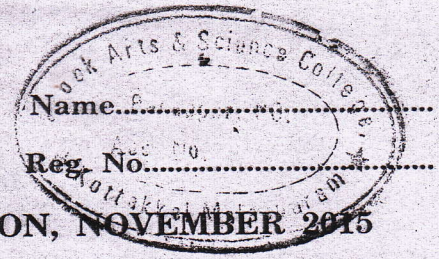
- 31 Write short notes on :

- (a) Multiprogrammed Operating System.
- (b) Time Sharing Operating System.
- (c) Distributed Operating System.

(2 × 4 = 8 weightage)

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(Pages : 2)



**THIRD SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2015**

(CUCBCSS—UG)

Complementary Course

BCS 3C 03—FUNDAMENTALS OF SYSTEM SOFTWARE, NETWORK AND DBMS

Time : Three Hours

Maximum : 64 Marks

**Part A**

*Answer all questions.*

*Each question carries 1 mark.*

1. In an entity relationship diagram rectangles represent \_\_\_\_\_.
2. What does the DOCTYPE declaration define in html ?
3. The topology with highest reliability is \_\_\_\_\_.
4. Give an example for system software.
5. \_\_\_\_\_ links the program with other programs needed for its execution.
6. Name the operating system that reads and reacts in actual time.
7. The method of communication in which transaction takes place in both directions, but only in one direction at a time, is called \_\_\_\_\_.
8. Transmission data rate is decided by \_\_\_\_\_.
9. Name the ACID properties of transaction.

(9 × 1 = 9 marks)

**Part B**

*Answer all questions.*

*Each question carries 2 marks.*

10. What is a TAG ? Explain in detail.
11. Mention some advantages of assembly language over high level language.
12. List the disadvantages of bus topology.
13. What is the use of application layer in OSI Reference model ?
14. What is Normalization ? Why do we need normalization ?

(5 × 2 = 10 marks)

**Turn over**

**Part C**

*Answer any five questions.  
Each question carries 5 marks.*

15. Explain list tag.
16. Describe the components of fibre optic cable with help of block diagram.
17. What is language processing ? Describe various types of language processors.
18. What are the different types of database end users ? Discuss the main activities of each.
19. Explain Insert into and Select clause with examples.
20. Explain about Entity, Integrity, Referential Integrity and Foreign keys.
21. Explain the main responsibilities of Data Link Layer.
22. Write short note on Network Topologies and their uses. (5 × 5 = 25 marks)

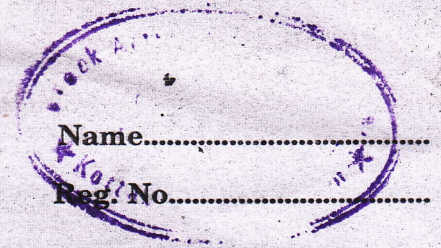
**Part D**

*Answer any two questions.  
Each question carries 10 marks.*

23. Explain various cabling techniques with suitable figures.
24. Explain different types of Operating System in detail.
25. Explain the features of E-R Model. (2 × 10 = 20 marks)

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(Pages : 2)



**THIRD SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2014**

(UG-CCSS)

Complementary Course—Computer Science

CS 3C 03—FUNDAMENTALS OF SYSTEM SOFTWARE, NETWORK AND DBMS

Time : Three Hours

Maximum : 30 Weightage

I. Answer *all* questions :

- 1 \_\_\_\_\_ means collection of programs, to enhance the capabilities of the hardware.
- 2 \_\_\_\_\_ is an interface between user and the system.
- 3 \_\_\_\_\_ is an example for application software.
- 4 \_\_\_\_\_ is an example for multipoint topology
- 5 \_\_\_\_\_ is a cable that accepts and transports signals in the form of light,
- 6 \_\_\_\_\_ propagation, very high-frequency signals are transmitted in straight lines directly from antenna to antenna.
- 7 The most common UTP connector is \_\_\_\_\_.
- 8 The \_\_\_\_\_ is used to define the structure of a database.
- 9 \_\_\_\_\_ command is used to delete a table.
- 10 The \_\_\_\_\_ helps the browser to display a horizontal line In HTML document.
- 11 \_\_\_\_\_ is the space between the cell border and the cell contents and is specified in pixels.
- 12 \_\_\_\_\_ element defines a graphic image on the page.

(12 × ¼ = 3 weightage)

II. Answer *all* nine questions :

- 13 Explain time sharing.
- 14 What is a compiler ?
- 15 What is meant by topology ?
- 16 What is meant by transmission media ?
- 17 What is meant by record ?
- 18 What is meant by relationships ?
- 19 Define the syntax of INSERT command.
- 20 What is a web browser ?
- 21 What is the use of <Title> element ?

(9 × 1 = 9 weightage)

**Turn over**

III. Answer any *five* questions :

- 22 Explain different language processors.
- 23 Differentiate batch processing and multiprogramming.
- 24 Explain microwave.
- 25 Explain the relational model with example.
- 26 Explain the DML language.
- 27 Describe different type of list elements.
- 28 Explain the structure of HTML.

(5 × 2 = 10 weightage)

IV. Answer any *two* questions :

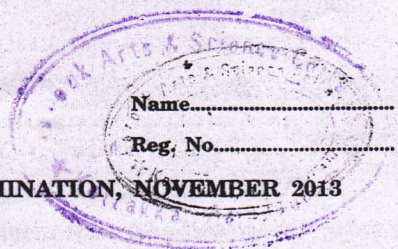
- 29 Explain in detail about different classification of programming language.
- 30 Explain the OSI model in detail.
- 31 Prepare site of your college having student details staff details, management details. It must contain all elements like List, Table, Linking etc.

(2 × 4 = 8 weightage)

*Return*

D 51539

(Pages 3)



**THIRD SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2013**

(UG-CCSS)

Complementary Course—Computer Science

CS 3C 03—FUNDAMENTALS OF SYSTEM SOFTWARE – NETWORK AND DBMS

(2009 Admissions)

Time : Three Hours

Maximum : 30 Weightage

**Part I**

Answer all questions.

1. In a multiprogramming environment :

- (a) the processor executes more than one process at a time.
- (b) the programs are developed by more than one person.
- (c) more than one process resides in the memory.
- (d) a single user can execute many programs at the same time.

2. Distributed systems should :

- (a) meet prescribed time constraints.
- (b) aim better resource sharing.
- (c) aim better system utilization.
- (d) aim low system overhead.

3. Writing a software in assembly language is preferred to writing in a high level language when :

- (a) optimal use of the hardware resources available is of primary concern.
- (b) programmer's productivity is important.
- (c) portability is important.
- (d) none of the above.

4. Which of the following is an unguided transmission media ?

- (a) Coaxial cable.
- (b) Fiber optics.
- (c) Twisted pair.
- (d) Microwave.

5. End-to-end connectivity is provided from host to host in \_\_\_\_\_ layer.

- (a) Network.
- (b) Transport.
- (c) Session.
- (d) Presentation.

Turn over

6. A high speed communication equipment typically would not be needed for :

- (a) E-mail.
- (b) Transferring large volume of data.
- (c) Supporting communication between nodes in a LAN.
- (d) all of the above.

7. Which normal form is considered adequate for relational database design ?

- (a) 2 NF.
- (b) 3 NF.
- (c) 4 NF.
- (d) 1 NF.

8. Student and courses enrolled, is an example of :

- (a) one-to-one relationship.
- (b) one-to-many relationship.
- (c) many-to-one relationship.
- (d) many-to-many relationship.

9. The employee salary should not be greater than Rs. 2000. This is :

- (a) integrity constraint.
- (b) referential constraint.
- (c) over-defined constraint.
- (d) feasible constraint.

10. The SQL statement

```
SELECT SUBSTR ('123456789', 2, 4) FROM DUAL ;
```

prints

- (a) 6789.
- (b) 2345.
- (c) 1234.
- (d) 456789.

11. Which command in SQL is used to get input from the user ?

- (a) GET.
- (b) ACCEPT.
- (c) READ.
- (d) CIN.

12. Which of the following is not a web browser ?

- (a) Google Chrome.
- (b) Mozilla firefox.
- (c) Opera.
- (d) Solaris.

(12 × ¼ = 3 weightage)

### Part II

Answer all questions.

13. What is the use of <IMG> tag in HTML ?

14. Discuss about DELETE command in SQL.

15. What do you mean by referential integrity ?

- OS ✓ 16. What is an assembler ?
- OS ✓ 17. What are real-time systems ?
18. Define WAN.
- OS ✓ 19. Explain the term time-sharing.
20. Differentiate between twisted pair and unshielded twisted pair cables.
- SQL ✓ 21. Discuss the use of ALTER command in SQL.

(9 × 1 = 9 weightage)

### Part III

Answer any five questions.

- DBMS ✓ 22. Explain the general structure of an HTML document.
23. Discuss about the working principle of Fiber optic cables.
24. Describe in detail the Hierarchical model.
25. What are the important functions of an operating system ?
26. Explain, how tables are created in HTML.
27. Describe star topology in detail.
28. Discuss the functionalities of an HTML editor.

(5 × 2 = 10 weightage)

### Part IV

Answer any two questions.

- DBMS ✓ 29. Explain TCP/IP reference model.
30. Compare relational, network and hierarchical model.
31. Describe any two unguided transmission media in detail.

(2 × 4 = 8 weightage)

D 51538

(Pages : 2)

Name.....

Reg. No.....

**THIRD SEMESTER B.Sc. DEGREE EXAMINATION  
NOVEMBER 2013**

(U.G.—CCSS)

Complementary Course : Computer Science

CS 3C 03—FUNDAMENTALS OF SYSTEM SOFTWARE, NETWORK AND DBMS

Time : Three Hours

Maximum : 30 Weightage

I. Answer *all* questions :

- 1 Translator for low level programming language was termed as \_\_\_\_\_.
- 2 A program in execution is called \_\_\_\_\_.
- 3 \_\_\_\_\_ is an example for multi-point topology
- 4 \_\_\_\_\_ is the amount of time required a message travel from one device to another.
- 5 \_\_\_\_\_ is an example for MAN.
- 6 \_\_\_\_\_ propagation, very high-frequency signals are transmitted in straight lines directly from antenna to antenna.
- 7 In relational model data are stored in \_\_\_\_\_.
- 8 The \_\_\_\_\_ Language is used to define the structure of a database.
- 9 \_\_\_\_\_ is an example for DML.
- 10 The \_\_\_\_\_ helps the browser to display a horizontal line in HTML document.
- 11 \_\_\_\_\_ element defines a ordering a list on the page.
- 12 \_\_\_\_\_ element is used underline a text.

(12 × ¼ = 3 weightage)

II. Answer *all* questions :

- 13 Explain multi-programming.
- 14 What is a complier ?
- 15 What is meant by topology ?
- 16 What is meant by networks ?
- 17 Define Database.
- 18 What is meant by relationships ?

Turn over

- 19 Define the syntax of update command.
- 20 What is meant by webpage ?
- 21 What is the use of <SUP> element ?

(9 × 1 = 9 weightage)

III. Answer any *five* questions :

- 22 Explain different language processors ?
- 23 Differentiate Batch processing and Time sharing ?
- 24 Explain about Satellite.
- 25 Explain the network model with example.
- 26 Explain the DML language.
- 27 Describe different type of structural elements.
- 28 Explain the structure of HTML.

(5 × 2 = 10 weightage)

IV. Answer any *two* questions :

- 29 Explain in detail about different classification of programming language.
- 30 Differentiate the OSI model and internet layer in detail.
- 31 Explain linking, listing, importing image, tables in HTML.

(2 × 4 = 8 weightage)

**THIRD SEMESTER B.Sc. DEGREE EXAMINATION  
NOVEMBER 2012**

(CCSS)

Computer Science – Complementary Course

CM CA 03 – FUNDAMENTALS OF SYSTEM SOFTWARE, NETWORKS AND DBMS

Time : Three Hours

Maximum : 30 Weightage

I. Answer all *twelve* questions :

1. \_\_\_\_\_ software is a set of one or more program designed to control the operation and extend the processing capabilities of a computer..
2. \_\_\_\_\_ is an example of time sharing operating system.
3. \_\_\_\_\_ is a translator program that translates a high level language program into its equivalent machine language program.
4. \_\_\_\_\_ refers to data transfer rate of a communication system.
5. \_\_\_\_\_ are groups of specially wrapped and insulated wire lines capable of transmitting data at high rates.
6. MAN stands for \_\_\_\_\_.
7. \_\_\_\_\_ is an example of a data model.
8. A tuple is also known as \_\_\_\_\_.
9. CREATE statement is used for \_\_\_\_\_.
10. To modify the structure of a table \_\_\_\_\_ command is used.
11. \_\_\_\_\_ provide additional information about an HTML element.
12. HTML paragraph are defined with \_\_\_\_\_ tag.

(12 × ¼ = 3 weightage).

II. Answer all *nine* questions :

13. Define operating system.
14. List any *two* features of High Level Languages.
15. What is a WAN?
16. List any *four* roles of a communication protocol.

Turn over

- 17. What do you mean by "Broad band"?
- 18. Define DBMS.
- 19. Define hierarchical model.
- 20. Write and explain the syntax of INSERT command.
- 21. Define Hypertext.

(9 x 1 = 9 weightage)

III. Answer any five questions :

- 22. Explain the function of an operating system.
- 23. Compare Machine Language, Assembly Language and High Level Language.
- 24. Briefly explain the functions of various layers of Internet protocol.
- 25. Compare star and ring topologies.
- 26. Briefly explain the feature of network data model.
- 27. Write SQL statements for the following :
  - (a) Create a table with accno, name and balance (with accno as primary key).
  - (b) Add a sample record : "101", "XYZ", 1000.
  - (c) Update the balance to 2000.
- 28. Explain any five HTML tags.

(5 x 2 = 10 weightage)

IV. Answer any two questions :

- 29. Discuss various communication media.
- 30. With suitable example, explain relational data model. List the advantages of relational model over other models.
- 31. Create a web page of your choice using HTML. Include as many features as possible.

(2 x 4 = 8 weightage)

Define

Data base relationships

2- Compiler DBMS

hierarchical model

27) Syntax of INSERT command

→ UPDATE

→ record

28) Time sharing

→ (Title) element

→ referential integrity

→ syntax of DROP

→ basic desktop system & safety

→ with help of: explain how can delete a column in DBMS

→ SQL DELETE command

→ assembler

→ Real-time system

→ ALTER

→ Assembly languages / high-level languages