B.Sc. IT (Part I) Examination, 2013

OFFICE AUTOMATION PC SOFTWARE

Part A (Marks: 10)

1. Why do you need to preview a document?

2. What is meant by formatting text?

3. What is the auto text feature is used for?

4. What is cell referencing?

5. Explain the function of goal seek.

6. Explain the function of circular references.

7. What is the purpose of short cuts?

8. What is slides from outline power-point?

9. What paste as hyperlink in MS Word?

10. How many rows and columns in MS-Excel sheet?

Part B (Marks: 10)

1. Mention the ways of editing a table using mouse and keyboard.

2. What is format painter? Explain its function.

3. Describe any two views provided by the word.

4. Explain the function of pivot tables.

5. Explain OLE in MS-PowerPoint.

Part C (Marks: 30)

1. (a) Explain the concept of GUI. What are the advantages of windows explorer? Explain the File, edit and View menus of explorer.

(b) Explain the various managerial function of MS-Windows.

OR

(a) What is GUI concept? What are the major software components on control panel. Explain in brief.

(b) What is purpose of Windows Explorer? Explain, how to open folder through explorer?

2. (a) What are the different views available in MS-Word? What is the purpose of each of these?

(c) What do you mean by wizard? Explain the process of prepairing a letter using the wizard.

OR

Discuss the utility of mail-merge facility in word. Write a small program to show the benefits of this facility for preparing mailing letters and envelops.

3. (a) Distinguish between protecting documents and adding password to the document.

(b) Describe the file types associated with MS-Word files.

OR

(a) What do you understand by spreadsheet? Explain main features.

(b) Describe the files types associated with MS-Word.
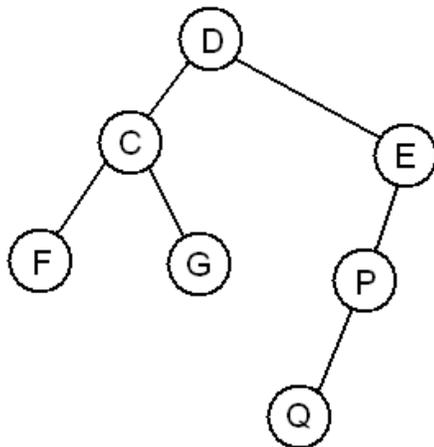
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C PROGRAMMING & DATA STRUCTURE

Part A (Marks: 10)

1. What do you understand by type conversion?

2. Why we need different data type?

3. What is array initialization?

4. Give the prefix for the following expression:

   (a+b) * d/c * (e-f)

5. Give the inorder, postorder for following tree:


6. What is merkging?

7. What is output of following:

   main() {

   printf("%d", printf("Tim");}

8. What is threaded tree?

9. Explain double link list?

10. What is composit data type?

Part B (Marks: 10)

1. What is multidimension array?

2. Explain pointers to array.

3. What is hashing mechanism?

4. Write a program to calculate length of a text file by using file handling concept.

5. Prove that the maximum number of node in a binary tree of height "K" is $2^{k-1}-1$.
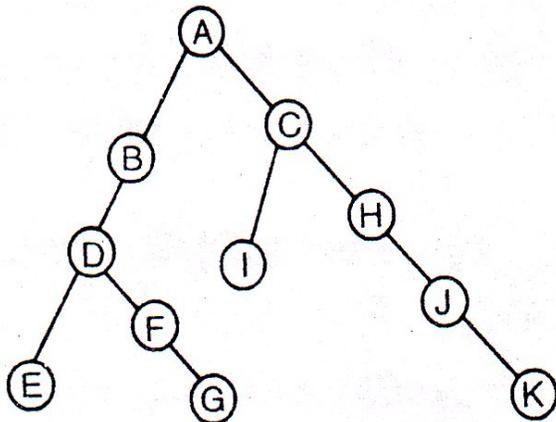
Part C (Marks: 30)

1. Apply DFS and BFS to visit all vertics in the following graph:
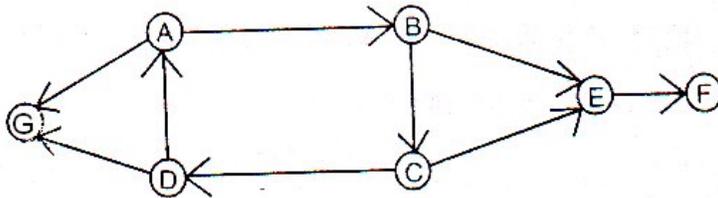
Show each step clearly.

OR

Give the preorder and postorder traversal of the following tree:

2. Explain sequential file organization and ISAM with an example.

OR

Search the number 14 using linear and binary search. Show all steps.

25 8 15 18 20 32 14 07 05 01

3. Explaint the following with example:

(a) Quick sort

(b) Merge sort

OR

Write short notes on the following:

(a) Travel salesman problem

(b) Kruskal Algorithm

(c) Tower of Hanoi

(d) Header linked list

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CIRCUIT ANALYSIS & ELECTRONIC DEVICES

Part A (Marks: 10)

1. Write binary numbers corresponding to following decimal number

   (a) 786   (b) 121

2. Convert decimal number 110 to its binary equivalent.

3. Write truth table for X-Nor gate.

4. Convert A9B5.49 hexadecimal number to its equivalent decimal number.

5. Write hexadecimal equivalent for 5076 decimal.

6. What is the value of one byte in bit form.

7. Write the truth table for following logic circuit:
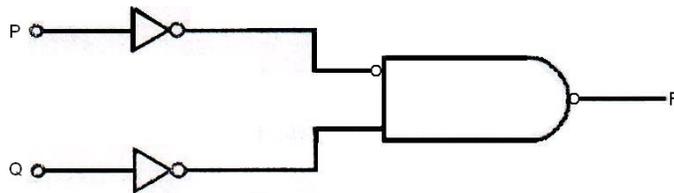
8. Add 1101 and 0011.

9. Give truth table of Universal gate.

10. Multiply 1100 with 0101.

Part B (Marks: 10)

1. Convert 0.95 to its binary equivalent.

2. Write basic rules for NAND gate.

3. Draw logic circuit which represents the boolean equation :

   $Y = (A'B + AB').(C'')$

4. Define half adder.

5. Define demultiplexer.

Part C (Marks: 30)

1. (a) Describe the operating characteristic of BJT.

   (b) Describe full adder with its logic diagram and (logic circuit) with truth table.

   OR

   (a) How will you connect (NOT+AND) gates to get an OR gate?

   (b) Define Quine, Mcclusky method in brief with suitable exmple.

2. Describe S-R Flip-Flop with its block symbol and truth table and also explain T Flip Flop.

   OR

   (a) Explain the switching action of Bipolar Junction Transistor.

   (b) Describe DEMUX. And also draw its circuit diagram.

3. Write short note on following:

   (a) Digital ICs

   (b) Registers

   OR

   Write short notes on following:

   (a) Setting filters

   (b) Setting up of screen displays.

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DATABASE MANAGEMENT SYSTEMS

Part A (Marks: 10)

1. What is referential integrity?

2. What is data abstraction?

3. What is generalization?

4. Define database.

5. What is difference between list and display all?

6. What is the syntax of Browse command?

7. What is the difference between CTOD() and DTOC()?

8. What is serializability?

9. How many types of loopings are in FoxPro?

10. What is redundancy?

Part B (Marks: 10)

1. What is the difference between sorting and indexing in FoxPro?

2. What is the need of normalization?

3. What are integrity constraints?

4. What do you mean by hashing?

5. What are the functions of database administration?

Part C (Marks: 30)

1. What is data modeling? Discuss the various data modeling methods available.

OR

Explain the following commands:

(a) Set Filter

(b) Set Clock

(c) Set Relation To

(d) Set Alternate

(e) Set Memo Width

2. Define DDL, DML and DCL with suitable examples.

OR

Write a FoxPro program to find the factorial of given number.

3. What is an E-R diagram? Discuss Entity and attribute. Draw an E-R diagram of Bank Management.

OR

What is concept of Key in a table and discuss different kind of keys in database.