

Class: M.Tech (CSE/IT)- 1st Sem.
Title: Advanced Data Structure & Algorithm using C++ (MT-CSE-111)
Assignment Number: 2
Last Dates for Submission: 10th Nov, 2016

Instructions:

1. Write the responses to the assignment in your own handwriting.
2. Submit the responses to your HOD within the due date.
3. Write your name, programme and enrollment number clearly at the top of the Pages.

Question 1

- a) Explain the all searching method with example.
- b) Explain heap and radix sort with example.

Question 2

- a) What is Graph and explain its all technology?
- b) Explain DFS and BFS with example.

Course Code: MT-CSE-112
Class: M.Tech (CSE/IT)- 1st Sem.
Title: Data Communications & Computer Network
Assignment Number: 2
Last Dates for Submission: 10th Nov, 2016

Instructions

1. Write the responses to the assignment in your own handwriting.
2. Submit the responses to your HOD within the due date.
3. Write your Name, Programme, and Enrolment No. clearly at the top of the page.

Question 1:

- a) How congestion control is managed at transport layer? Explain various techniques.
- b) Compare between X.25 and Frame Relay. Explain the use of FECN and BECN in Frame Relay.

Question 2:

- a) What are the major differences between wired LANs and wireless LANs? What are the two main problems with wireless LANs. Briefly, describe the physical layer standards of IEEE 802.11.
- b)
 - i) Make a comparative analysis between IPV4 and IPV6.
 - ii) Discuss why repeaters are needed in a communication channel. What is a key difference between an analog repeater and a digital repeater?

Course Code: MT-CSE-113
Class: M.Tech (CSE/IT)- 1st Sem.
Title: Advance DBMS
Assignment Number: 2
Last Dates for Submission: 10th Nov, 2016

Instructions

1. Write the responses to the assignment in your own handwriting.
2. Submit the responses to your HoD within the due date.
3. Write your Name, Programme and Enrollment No. clearly at the top of page.

Question 1:

- a) Explain the Architecture of Object Oriented and Object Relational Databases in detail.
- b) What are Image and Multimedia Databases? Discuss R-tree, k-d tree, and Quad trees in detail.

Question 2:

- a) What is XML? How XML can be utilized for fast retrieval of data? Explain the Structure of XML data, Document Schema, Querying XML data, Storage of XML data and XML applications.
- b) Write the short note on the following:
 - i) Content Based Retrieval in Image and Multimedia Databases.
 - ii) Nested and Multilevel Transactions.

Course Code: MT-CSE-115
Class: M.Tech (CSE/IT)- 1st Sem.
Title: Programming Practices
Assignment Number: 2
Last Dates for Submission: 10th Nov, 2016

Instructions

1. Write the responses to the assignment in your own handwriting.
2. Submit the responses to your HoD within the due date.
3. Write your Name, Programme and Enrollment No. clearly at the top of page.

Q.1

(a) Write python program for the following:

1. to Find the Square Root
2. to Solve Quadratic Equation
3. to Generate a Random Number

(b) Write python program for the following:

1. to Swap Two Variables
2. to Check if a Number is Odd or Even

Q.2

(a) Explain the use of break and continue statement with the help of an example in Scilab.

(b) Write a Scilab code that reads an image from a file, flips this horizontally and writes the result back to a file.

Course Code: MT-CSE-114
Class: M.Tech (CSE/IT)- 1st Sem.
Title: Advanced Computer Architecture
Assignment Number: 2
Last Dates for Submission: 10th Nov, 2016

Instructions:

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Question 1

- a) Differentiate between linear pipeline processor & non linear pipeline processor.
- b) Describe the vector super architecture with neat & clean diagram.

Question 2

- a) Explain three parallel architecture models & compare their merits & demerits.
- b) What is meant by coherence problems? Describe various protocols for cache coherence.