B.E /B.Tech. DEGREE EXAMINATIONS, NOV/DEC 2013
COMPUTER SCIENCE AND ENGINEERING
CS8202 – PRINCIPLES OF COMPUTER ENGINEERING
II Semester
(REGULATION 2012)

Time : 3 Hours   Max. Marks : 100

Part A (10 * 2 = 20)
Answer all questions

1. Draw a flowchart to find whether the given string is palindrome or not?
2. What are Fourth generation techniques?
3. What are scripting languages? What are its advantages?
4. Differentiate compilers and Interpreters.
5. What is meant by kernel?
6. Define virtual memory.
7. Define data dictionary.
8. Give the main responsibilities of database administrator.
9. What is OSI?
10. Which topology will you suggest for a home network? Why?

Part B (5 * 16 = 80)

11. How to plan a program for sorting the given numbers using bubble sort.
    i)   Write an algorithm and explain the logic involved.
    ii) Write pseudocode for your algorithm and explain the advantages.

12. a) Explain the features of any one object oriented programming language. Develop a program for merging two arrays and explain the peculiar advantages with that language.

(OR)

    b) i) Explain the generation of languages. Bring out the advantages and disadvantages of each.   (12)
    ii) What language would be a good choice for writing driver software for a new computer printer? Why?   (4)

13. a) Explain scheduling. What scheduling concept was critical to the development of timesharing computers, and has remained an important part of scheduling for interactive computer systems?

(OR)

    b) Discuss virtual memory management with necessary diagrams. Why do virtual memory systems include a modified bit in the page table entry?

14. a) Explain the three tier architecture in detail.   (10)
    ii) Design a database for a retail shop. Identify the entities and their attributes.   (6)

(OR)

b) i)   Discuss in detail the various database models available and their relevance.   (10)

ii)   Model an ER diagram for a course registration system.   (6)

15. a) What are network protocols? Why would an application choose to use UDP? Explain the UDP protocol and identify applications that might prefer UDP.

(OR)

b) What do you mean by switching? Explain the various switching technologies available with necessary diagrams.