UNIVERSITY OF KERALA SCHOOL OF DISTANCE EDUCATION IVth SEMESTER BCA ASSIGNMENT

CP1441 Introduction to Information Security

- 1. Compare substitution ciphers, transposition ciphers.
- 2. Differentiate IPv4 and IPv6
- 3. Comparative study of PGP and S/MIME
- 4. Explain firewall and characteristics of firewall
- 5. Cyber Crime and the IT Act 2000/2008

CP1442 Visual Tools

- 1. Explain different tools in VB IDE.
- 2. What are the properties of collection objects.
- 3. Explain different loop statements used in VB.
- 4. Explain about OLE container Control.
- 5. How errors are handled in VB.

CP1443 Database Management Systems

- 1. Explain the fundamental operations of relational algebra.
- 2. Discuss about data dictionary.
- 3. Discuss tuple relational calculus.
- 4. Discuss the pitfalls in relational database design.
- 5. Discuss the referential integrity in detail with example

CP1444 Design And Analysis of Algorithms

- 1. What are randomized algorithms? Explain.
- 2. What are NP hard and NP complete problems? Explain.
- 3. What is back tracking? Explain how 8-queens problem can be solved using backtracking.
- 4. What are spanning trees? Explain the different algorithms to determine minimum cost spanning tree with examples.
- 5. Explain the recursive algorithm to find the minimum and maximum element in an array.

CP1445 System Software

- 1. Explain about SIC machine architecture.
- 2. Explain different components that can be used when structuring an assembly language program.
- 3. What do you meant by program relocation?
- 4. Write an algorithm for absolute Loader. Explain.
- 5. Explain the purpose and use of LOCCTR AND OPTAB in assembler.