

本試題是否可以使用計算機：可使用 · 不可使用 (請命題老師勾選)

Each problem is worth of 10 points. If calculations are required, please include the calculation process then provide the final answer with underline.

1. Find the simplest solution of $F=x'yz+xy'z'+xyz+xyz'$.
2. Find the checksum of the hexadecimal value 96EB.
3. The subnet mask for a class C network is 255.255.255.192. How many subnetworks are available?
4. What are the five components of a computer?
5. 2385 in decimal = () in binary?
6. What is entropy in data compression? What is Huffman encoding?
7. What are the four criteria for network security? Please describe Certification Authority in computer network.
8. Find all the functional dependencies of the following table.
(Customernumber, Customersname, Balance, Creditlimit, Salesrepnumber, Salesreplastname, Salesrepfirstname)
9. Please describe two methods to prevent deadlocks (in O.S. or DBMS).
10. What is the System Development Cycle?