



南台科技大學 100 學年度研究所考試入學招生考試

系組：工管所、資管所

准考證號碼：□□□□□□

科目：計算機概論(313)

(請考生自行填寫)

注意事項	一、請先檢查准考證號碼、報考系(組)別、考試科目名稱，確定無誤後再作答。 二、所有答案應寫於答案紙上，否則不予計分。 三、作答時應依試題題號，依序由上而下書寫，作答及未作答之題號均應抄寫。
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1. Explain the following terms in detail:(10%)
 - (A).XML(eXtensible Markup Language)
 - (B).Phishing
2. Please describe the differences list in the following : (10%)
 - a. Interpreter
 - b. Compiler
3. (A).There are two IP addresses, One is 140.116.72.72/25, the other is 140.116.72.130/25, please explain whether two IP addresses are in the same subnet?(5%)
(B).If one subnet mask is 255.255.248.0 , how many IP addresses can be used in this subnet ? (5%)
4. If a binary tree which preorder traversal is A B C D E F G H, and inorder traversal is C D B A E F G H, please sketch the binary tree.(10%)
5. If you are a "Hacker", and want to attack a company that don't have any prevention for information security. What will you do to intrude the computer system of company? Please describe steps as clear as possible.(10%)
6. Draw the parse tree for the expression $y + z + y \times w$. (10%).
7. Express $5\frac{7}{8}$ and $4\frac{3}{4}$ in binary notation. Perform addition of these two values in binary notation and convert the result to its equivalent base ten forms. (10%)
8. Summarize the distinction between the traditional waterfall model of software development and the newer incremental and iterative paradigms. (10%)
9. Describe an application that you would expect to involve a static data structure. Then describe an application that you would expect to involve a dynamic data structure. (10%)

10. A procedure for printing the data in a binary tree is shown below. Identify the following tree whose nodes would be printed by the algorithm. (10%)

Procedure PrintTree (Tree)

if (Tree is not empty)

then (Apply the procedure PrintTree to the tree that appears as the left branch in Tree;

 Print the root node of Tree;

 Apply the procedure PrintTree to the tree that appears as the right branch in Tree)

